

Senior Transportation Officer Qualification Course Mode Operations

There are times when the Transportation Officer selects air mode over surface mode under the following circumstances:

- Air transportation is the only mode available.
- The overall cost of shipping via surface is greater than shipping via air.
- The materiel being shipped is of high value or a security risk.
- The nature of the cargo demands movement by air for other reasons (time sensitive or highly specialized).

Air Force strategic and theater airlift, as well as commercial fixed-wing assets capabilities include:

- Heavy drop and container delivery system (parachute or free drop)
- Low altitude parachute extraction system
- · Air land (most preferred)
- Adverse weather aerial delivery system
- · Aerial bulk fuel delivery system

Strategic Air Operations





For movements conducted under the Joint Operations Planning and Execution System (JOPES), the Time Phased Force Deployment Data (TPFDD) identifies the movement mode. More on this in future lessons.

Airlift requests are categorized as either preplanned, (normally 72 hours in advance), or immediate (unanticipated or urgent).

Immediate requests (also known as emergency), by pass the normal logistics community and are processed directly through operations channels.



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Lead-in

As a Senior Transportation Officer, you may be assigned within the Mobility Branch of the Support Operations (SPO) section of the Distribution Management Center (DMC), which duties include:

- Provide transportation expertise at the Theater Sustainment Command
- Perform mission planning for deployment and redeployment
- Act as executive agent for movement control within the theater
- Manage Title 10 responsibilities for the Common User Land Transportation (CULT) fleet
- Recommend theater transportation priorities

As a Senior Transportation Officer, you may be assigned within the Mobility Branch of the Support Operations (SPO) section of the Distribution Management Center (DMC), where your duties might include those shown here.











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Attributes of Modular Force Transportation

An efficient modular force rapidly applies the correct composite of capabilities to accomplish a mission. Transportation capabilities must mirror these requirements.

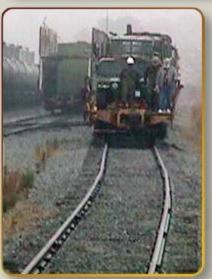
These principles are common to all transportation operations across the range of military operations and the time continuum.

- Responsive Modular Operations
- Enabled Theater Access and Agile Mobility
- Network-centric Operations
- Force Protection
- In-transit Visibility (ITV)
- Interoperability

The modular force is designed to minimize its footprint / and capitalize on its capabilities to perform to high standards in different operational environments.

To perform to high levels, these principle concepts should be integrated in all transportation activities.









Responsive Modular Operations

Army Transportation capabilities:

- Are modular and flexible able to adapt and operate anywhere in the battlespace
- Respond to rapidly shifting operational requirements - the task organization will change frequently based on the mission, phase of an operation, or priority of support
- Allow a transportation unit to operate at platoon, squad, team, and if required, individual platform level, yet maintain company integrity

Enabled Theater Access and Agile Mobility

Army Transportation units and assets are capable of shifting resources from one point on the battlefield to another with little notice.

Army mode, terminal, and movement control assets possess the capability to function at any point the Joint Force moves to and through, to include improved and austere:

- Air
- Rail
- Motor
- Water
- · Multi-model access points
- Nodes
- · Lines of communication

In-transit Visibility

In-transit visibility is a critical capability used to sustain a modular force.

ITV tracks units, equipment, personnel, supplies, and distribution assets as they move through the distribution system.

ITV supports the capability to:

- Maintain near real-time monitoring and communication with Transportation assets
- Maintain in-transit visibility of cargo
- Redirect movements based on shifting operational requirements, threats, or priorities

Network-centric Operations

Transportation assets operate between and within non-contiguous battlespaces.

Army Transportation organizations may be the first to see new developments and will need to relay information that affects operational decision-making.

This requires transportation units to be capable of accessing and employing the full range of situational awareness capabilities including:

- New and emerging technologies
- Long-range, near real-time communications
- Operating within the global transportation network

Force Protection

Modular force operations are widely distributed to accomplish multiple objectives.

This places greater self-protection responsibilities on logistic assets now required to operate in the spaces between non-contiguous areas of operation.

This means modular transportation forces require force protection that often exceed a transportation unit's self protection capabilities.

To overcome this deficiency, sustainment/replenishment activities are pushed based on the maneuver units' operational tempo and synched with tactical operations.



Interoperability

Interoperability makes demands on:

- Army Transportation units
- Modular Army Transportation organizations and assets
- Sustainment and transportation headquarters organizations

Army sustainment and transportation headquarters must be capable of providing battle command of units engaged in transportation operations, to include:

- Organic Army assets
- Organizations, equipment, and/or personnel that may be:
 - Multi-national
 - Host-nation
 - Logistics Civil Augmentation Program (LOGCAP)

 Joint Force

Modular Army Transportation organizations and assets must be capable of supporting and interfacing with Joint, Interagency, and Multi-national (JIM) movement operations in the conduct of operations.

Army sustainment and transportation headquarters must be capable of providing battle command of units engaged in transportation operations, to include organic Army assets and multi-national, host-nation, LOGCAP, and Joint Force organizations, equipment, and/or personnel.



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Strategic Vision

Your knowledge of Transportation Corps Strategic Vision is vital in the understanding of it's mission and competencies.

The Stratigic Vision is as follows:

- The Transportation Corps is transforming with the Army and worldwide movement of units, personnel, equipment, and supplies.
- The focus is to move critical resources rapidly, under positive control, through an integrated, transportation-based global distribution system from the source to the Combatant Commander.
- Leverages emerging technologies and thrives on the digitized battlefield. We provide movement control and in-transit visibility.
- Guide delivery to deployed forces in a dynamic, nonlinear battlefield in accordance with the Chief of Staff of the Army's goals.
- The Soldiers and civilians of the corps are the keys to movement and distribution.

The Strategic Vision is as follows: the Transportation Corps is transforming, with the Army it's focus is to move critical resources rapidly, under positive control.

We will leverage emerging technologies, provide movement control, and in-transit visibility of personnel and supplies.

We will guide delivery to deployed forces in a dynamic, nonlinear battlefield, knowing that our Soldiers and civilians are the keys to movement and distribution.

Remember: We are the Transportation Corps; the Spearhead of Logistics. Nothing happens until something moves!





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Core Competencies

Transportation operations and processes revolve around the following fundamental transportation core competencies shown here:

- Plan, schedule, and supervise the use of each mode of transportation for the effective movement and distribution of units, personnel, equipment, and supplies.
- Plan, execute, and track the movement of materiel from the source to the Combatant Commander and serve as the Army's single movement controller and traffic manager.
- Provide theater port opening capabilities at fixed ports, unimproved beach sites, and during Logistics-Over-The-Shore (LOTS) operations.
- Provide DoD worldwide, single agency management for military traffic, land transportation, and common-user ocean terminals.
- Develop transportation concepts and doctrine and develop unit organizations and the requirements to support acquisition of transportation systems for the Army.
- Provide Joint Service Doctrine and Training Coordination, to include training and professional development for Active, Reserve Component, and civilian personnel in transportation and deployment methods.
- Provide field and sustainment maintenance and supply for marine and rail equipment.

Transportation operations and processes revolve around the following fundamental transportation core competencies shown here.









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Theater Structure

As a Senior Transportation Officer, you will often support theater operations.

To effectively operate within this venue, you must understand the role of transportation units within the theater structure as it relates to:

- National command structure
- · Theater operations
- Theater sustainment

Sustainment	Combat
USTRANSCOM	
SDDC	
TSC	ASCC
SUST	
мсв	Division
мст	ВСТ

The Army Service Component Command becomes the Field Army.

Within its command and control, the Theater Sustainment Command manages movement within the theater through other transportation and logistics organizations.



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USTRANSCOM	
SDDC	
TSC	ASCC
SUST	
мсв	Division
мст	вст

Function

The ASCC is recognized as the Theater Army and provides:

- Staff oversight of Theater Transportation Policies and Procedures
- Inter/Intra-theater deployment/redeployment of supplies and units in the area of operations
- · Establishment of priorites

Field Army G4 Main Mobility Ops Division 34/6/23 = 63 Field Army G4 OCP Mobility Ops Division 11/1/8 = 20



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USTRANSCOM	
SDDC	
TSC	ASCC
SUST	
мсв	Division
мст	вст

Function

- · Plans, advises, and coordinates
- Provides technical assistance for all Trans Ops

G4 Trans

- 1-MAJ (88A)
- 1-CW3 (882A Mobility Warrant Officer)
- 1-SGM (88Z)



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- Theater sustainment

Sustainment	Combat
USTRANSCOM	
SDDC	
TSC	ASCC
SUST	
мсв	Division
мст	вст

Function

- Deployment planning
- Force tracking

S4 Trans 1-CW2 (882A Mobility Warrant Officer) 1-SFC (88N)



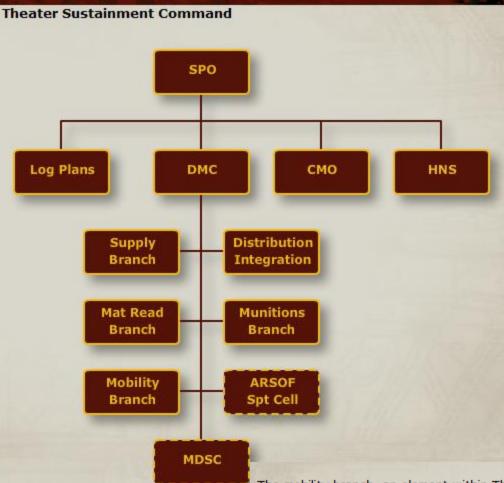
Senior Transportation Officer Qualification Course Movement Control Operations

The Theater Sustainment Command mission is to plan, prepare, rapidly deploy and execute operational-level logistics operations within an assigned theater.

Most transportation officer assignments at this level would be within the Mobility Branch of the Support Operations (SPO) section Distribution Management Center (DMC).

A Senior Transportation Officer's duties at this level include:

- Provide transportation expertise at the Theater Sustainment Command/Expeditionary Sustainment Command
- Perform mission planning for deployment and redeployment
- Executive agent for movement control within the theater
- Manage Title 10 responsibilities for the Common User Land Transportation (CULT) fleet
- Recommend theater transportation priorities



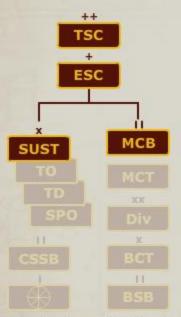
The mobility branch, an element within The Distribution Management Center of the TSC Support Operations section, provides guidance, plans, policies, and staff supervision for transportation operations.

A number of opportunities are available to the Senior Transportation Officer at this level.



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Theater Sustainment Command Structure



This is the structure of the Theater Sustainment Command (TSC) and the Expeditionary Sustainment Command (ESC) for transportation.

Theater Sustainment Command

Personnel			PO, DMC Branch		
	Officer	Warrant Officer	Enlisted	Total	N
	12	3	16	31	

Function

The TSC/ESC functions as the:

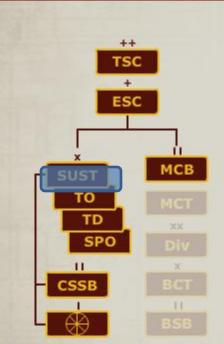
- · Executive Agent for Movement Control
- · Mission planner for deployment/redeployment
- . Manager for Title-X responsibilities for CULT
- · Manager for all facets of transportation information
- · Organization to recommend priorities

Personnel	l	ESC, SF	PO, DMC Branch	
1	Officer	Warrant Officer	Enlisted	Total
V	9	3	13	25



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Theater Sustainment Command Structure



This is the structure of the Theater Sustainment Command (TSC) and the Expeditionary Sustainment Command (ESC) for transportation.

Sustainment

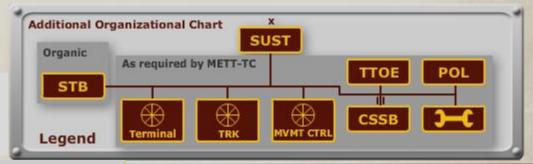
Personnel			pns Division Branch		
	Officer	Warrant Officer	Enlisted	Total	
	73	18	272	363	

Function

The sustainment brigade is a vital linkage to movement control within the theater structure. It extends the TSC reach to tactical and operational areas.

The sustainment brigade's mission comprises three basic functions:

- · Theater opening
- Theater distribution



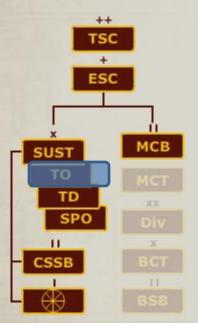
The sustainment command's distribution management includes movement control as an integral component of the theater distribution system.

The functional units attached to the sustainment brigade comprise its personnel and equipment.



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Theater Sustainment Command Structure



This is the structure of the Theater Sustainment Command (TSC) and the Expeditionary Sustainment Command (ESC) for transportation.

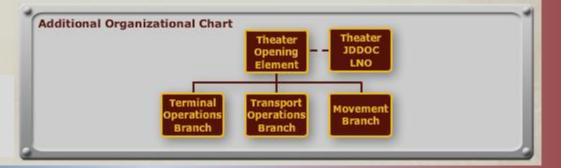
Theater Opening Element

Personn	el			
	Officer	Warrant Officer	Enlisted	Total
	11	2	22	35

Function

The Theater Opening Element provides staff augmentation to initially open a theater and establish initial distributions network.

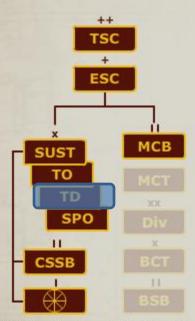
Except for the Terminal Operations Branch, all of the Army units that comprise the Theater Opening Element have 88A officers.





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Theater Sustainment Command Structure



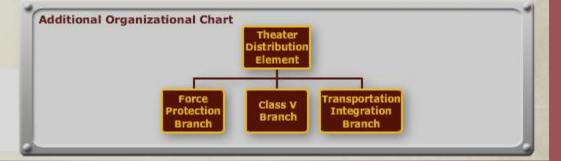
This is the structure of the Theater Sustainment Command (TSC) and the Expeditionary Sustainment Command (ESC) for transportation.

Theater Distribution Element

Officer	Warrant Officer	Enlisted	Total
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Function

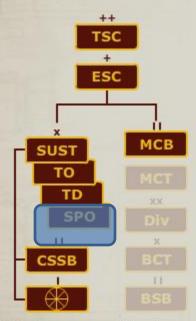
The Theater Distribution Element, Transportation Integration Augmentation provides additional staff for the initial operation of a Theater Distribution Hub.





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Theater Sustainment Command Structure



This is the structure of the Theater Sustainment Command (TSC) and the Expeditionary Sustainment Command (ESC) for transportation.

Support Operations

Personnel	Numb		personnel are cont ater requirements.	ingent
	Officer	Warrant Officer	Enlisted	Total
	2	0	2	4

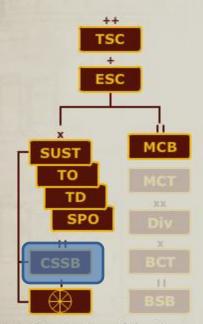
Function

- Identify intra-theater Lines Of Communication (LOC).
- Has primary responsibility for transportation management in theater.
- Supports the Geographic Combatant Command (GCC) concept of sustainment operations and Logistics Preparation of the Theater (LPT).
- Provides an integrated battlefield distribution information network for establishing and maintaining Total Asset Visibility
- Generates transportation requirements and processes
 Transportation requests based upon Mission, Enemy, Terrain,
 Troops available, Time, and Civilian (METT-TC) considerations,
 passing through the Sustainment Brigade (SB) SPO or the
 division and corps transportation officers to the DMC at the
 TSC/ESC.



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Theater Sustainment Command Structure



This is the structure of the Theater Sustainment Command (TSC) and the Expeditionary Sustainment Command (ESC) for transportation. Combat Sustainment Support Battalions

Officer	Warrant Officer	Enlisted	Total
22	23	24	69

Function

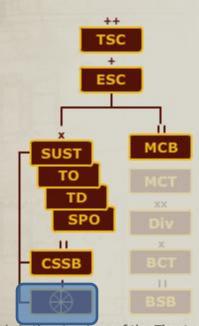
The CSSB is the building block upon which TSC sustainment capabilities are developed. Typically attached to a sustainment brigade, the CSSB is tailored to meet specific mission requirements.

- · Modular and standardized to provide a full spectrum of logistics support.
- Plans, coordinates, synchronizes, and executes logistics missions. Oversees distribution, sustainment, movement control
- operations, and coordinates external logistics functions. A flexible and multifunctional organization that assists in theater
- opening, distribution, and life support.



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Theater Sustainment Command Structure



This is the structure of the Theater Sustainment Command (TSC) and the Expeditionary Sustainment Command (ESC) for transportation.

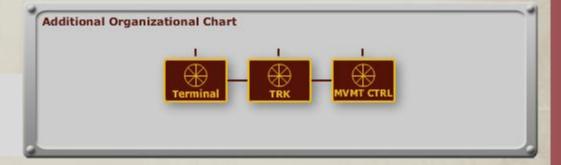
Transportation

Personnel	Transportation unit personnel dependent upon mission.				
	Officer	Warrant Officer	Enlisted	Total	
	7	1	6	14	

Function

A company may supply transportation services to the Sustainment Brigade in these areas:

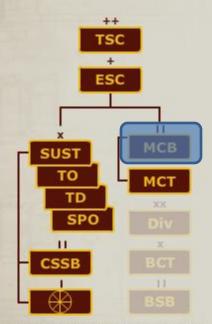
- · Terminal Operations
- Truck Operations
- Movement Control





Senior Transportation Officer Qualification Course Movement Control Operations

Theater Sustainment Command Structure



This is the structure of the Theater Sustainment Command (TSC) and the Expeditionary Sustainment Command (ESC) for transportation.

Movement Control Battalion

Personn	iel			
	Officer	Warrant Officer	Enlisted	Total
	15	2	42	59

Function

MCB:

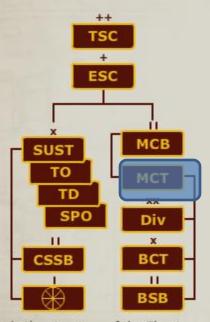
- Is the C2 for 4 to 10 MCTs in order to provide decentralized execution of MCB movement responsibilities throughout a specified AO.
- · Coordinates CULT assets
- · Serves as the Movement Control Center (MCC), as required

Additional Organizational Chart



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Theater Sustainment Command Structure



This is the structure of the Theater Sustainment Command (TSC) and the Expeditionary Sustainment Command (ESC) for transportation.

Movement Control Team

1			
Officer	Warrant Officer	Enlisted	Total
3	0	18	21

Function

An MCT is assigned to an MCB and may be:

- Composed of one or two people as designated by the unit
- Employed on an area basis
- Assigned to critical nodes in order to facilitate effective movement control
- Placed under the Operational Control (OPCON) or Tactical Control (TACON) of a Corps/Division Headquarters. Brigade Combat Team (BCT) Headquarters, Support Brigade, or Sustainment Brigade

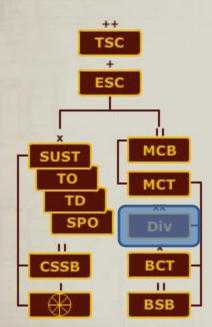
Four types of MCTs are used to support operations:

- Port movement
- Area movement
- · Movement regulating
- · Cargo documentation



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Theater Sustainment Command Structure



This is the structure of the Theater Sustainment Command (TSC) and the Expeditionary Sustainment Command (ESC) for transportation.

Division

Personnel		G4 1		
	Officer	Warrant Officer	Enlisted	Total
	1	1	1	3

Function

The Movement Control Personnel at the division level:

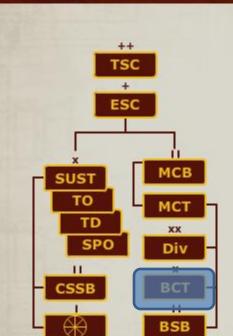
- Plan, advise, and coordinate
 Provide technical assistance for all transportation operations

Additional Organizational Chart



Senior Transportation Officer Qualification Course Movement Control Operations

Theater Sustainment Command Structure



This is the structure of the Theater Sustainment Command (TSC) and the Expeditionary Sustainment Command (ESC) for transportation.

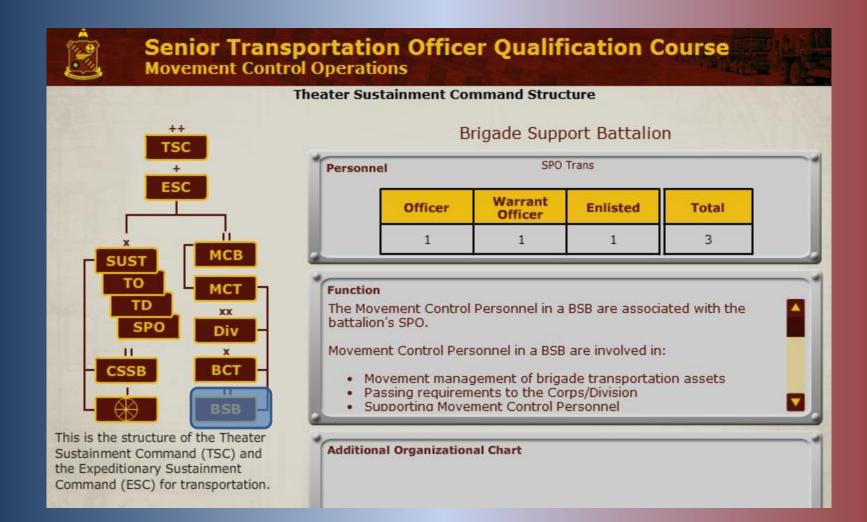
Brigade Combat Team

Officer	Warrant Officer	Enlisted	Total
0	1	1	2

Function

The Movement Control Personnel in a BCT are involved in deployment planning force tracking.

Additional Organizational Chart





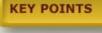
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Key Points

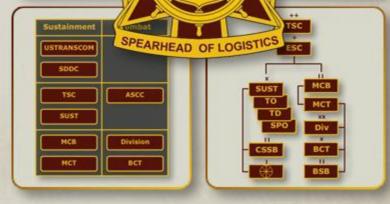
The following key points were discussed:

- Attributes of the modular force and transportation
- Strategic vision
- Core competencies
- Theater structure
- Theater Sustainment Command structure relative to movement control operations

The following key points were discussed: the attributes of the modular force and transportation, the strategic vision and transportation core competencies, the theater structure and the Theater Sustainment Command structure were shown and their relationship to movement control operations demonstrated.









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Quick Challenge



In-transit visibility is a critical capability to sustain a modular force. What is the definition of intransit visibility?

Select the best answer and then select Submit.

- A. The ability to see and relay information that affects operational decision-making in relationship to cargo movement
- B. The ability to see movement with joint, multi-national, nongovernmental organizations (NGO), modular force transportation organizations, and commercial operators
- C. The ability to track units, equipment, personnel, supplies, and distribution assets as they move through the distribution system
- D. The ability to see the protection on logistic assets required to operate in the spaces between non-contiguous areas of operation



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Quick Challenge



What organization executes operations for theater opening, theater distribution, and theater sustainment operations?

Select the best answer and then select submit.

- A. Movement Control Personnel
- **B. Movement Control Battalion**
- **C.Expeditionary Sustainment Command**
- D. Sustainment Brigade



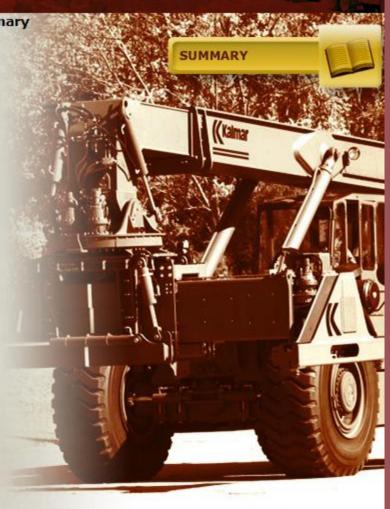
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Summary

In this lesson, you have learned about the:

- Attributes of the modular force and transportation
- Strategic vision
- · Core competencies
- Theater structure
- Theater Sustainment Command structure

These are the building blocks that create distribution in a developed Theater of Operations.





Senior Transportation Officer Qualification Course Mode Operations

Motivator

In this lesson, you will learn about the Mode Operations performed by the U.S. Transportation Corps and the transportation units that perform them.

Identifying Mode Operations by various Army transportation units will further enhance your understanding of U.S. Transportation capabilities.

As a Senior Transportation Officer, your application of this knowledge will help you and others to accomplish transportation missions.

The Army transports personnel, cargo, and equipment by motor, rail, air, and water with organic or contract assets.

Mode platforms include trucks, trains, containers, flatracks, watercraft, aircraft, and host nation assets.





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Objectives

Action:

Identify the Army Transportation Mode Operations Units within a theater and the function of each.

Condition:

In an environment configured for Interactive Multimedia Instruction (IMI).

Standard:

Identified the Army Transportation Mode Operations Units within a theater and the function of each to include:

- Motor transport
- · Watercraft transport
- · Air transport
- Rail transport





Senior Transportation Officer Qualification Course Mode Operations

Lead-in

The Army transports personnel, cargo, and equipment by motor, rail, air, and water with organic or contract assets.

Mode operations and movement control elements, working together, match up the correct asset capability, depending on cargo characteristics, required delivery time, and command priorities.

Once transportation mission requirements and assets are coordinated, the mode is selected from these areas:

- Motor
- Rail
- Air
- Water

Army transportation units play a key role in facilitating force projection and sustainment, ensuring that Army and joint forces that are projected globally, are able to be sustained in theater operations.

As a Senior Transportation Officer, your knowledge of movement control and mode operations will ensure mission accomplishment.

Mode operations and movement control elements, working together, match up the correct asset capability, depending on cargo characteristics, required delivery time, and command priorities.

Mode selection will be identified as either motor, rail, air, or water assets.

LEAD-IN













Senior Transportation Officer Qualification Course Mode Operations

All transportation involves a means to transport and the processes to achieve successful execution.

Transportation positions touch on a wide range of competencies executed by transportation units that support these modes of operation:

- Terminal operations
- Motor transportation operations
 - Management
 - Force protection operations
- Watercraft operations
- · Rail transportation operations

Centralized control enables planners to streamline transportation and increase efficiencies.

However, decentralized execution falls on the shoulders of specialized units who exercise capabilities in the following areas: terminal or port operations, motor transportation operations, to include unit provided force protection, watercraft, rail, and air transportation operations.

Competencies - Mode Operations







Terminal Operations

Terminal operation capabilities in air and sea ports of embarkation and debarkation include:

- Automated cargo documentation
- Air Terminal Movement Control Teams (ATMCTs)
- Arrival/Departure Airfield Control Group (A/DACG) personnel and equipment.

Motor Transportation Operations

Army Transportation units are the single largest provider of land surface movement capability in the Modular and Joint Forces.

Competencies in motor transportation operations include:

- Trailer Transfer Points (TTPs)
- Container management
- Flatrack management
- Line-haul operations
- The capability to support and interconnect with all other means of transportation

Force Protection Operations

Convoy leaders and individual operators must be fully trained in mobile defensive operations and the weapons systems employed to repel ground and air attack.

Logistic convoys must be organized and equipped to move through areas of the battlespace in a manner to ensure:

- Survivability
- Communications and information capabilities

Watercraft Operations

Army Watercraft provide Modular Forces increased access to the littoral areas of the battlespace by supporting:

- · Fixed port operations
- · Amphibious shore landings
- Operational maneuverability throughout intracoastal zones and inland waterways

Rail Transportation Operations

Modular Force would not be truly full-spectrum without rail transport's strengths in supporting force projection.

Modular Army Transportation operations include the capability to understand and fully integrate rail movement capability into the deployment process within CONUS and OCONUS operations.

Modular Army Transportation operations include the capability to understand and fully integrate rail movement capability into the deployment process within CONUS and within a theater of operations.



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Theater Sustainment Command, Support Operations

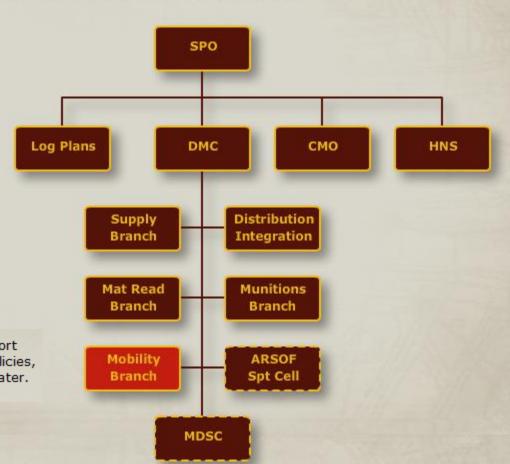
A main element of the Theater Sustainment Command coordinating staff is the Assistant Chief of Staff, Support Operations (SPO).

This staff section is responsible for sustaining the force in accordance with Army Service Component Command (ASCC) and Geographic Combatant Commander (GCC) priorities and intent.

The SPO supervises, among many other things, transportation and movement control activities associated with the support of the force.

Residing within the SPO is the Mobility Branch.

The Mobility Branch, an element within the Support Operations section, provides guidance, plans, policies, and staff supervision for Mode selection in a theater.





Senior Transportation Officer Qualification Course Mode Operations

Theater Sustainment Command, Support Operations (Cont.)

As Senior Transportation Officers, you must understand that the Distribution Management Center (DMC) Mobility Branch of the SPO:

- Provides primary input to the theater movement plan.
- Manages all facets of transportation information related to planning, coordinating, and evaluating all methods of transportation, movement control, and logistical support.
- Develops theater highway regulation, traffic circulation, and maneuver and mobility support OPLANS.
- Serves as executive agent for container, flatrack, and air pallet management, and coordinates all aspects of intermodal container use.
- Enforces priorities for air, land, and water transportation established by the ASCC and the supported combatant commander.



The Mobility Branch of the SPO: provides primary input, manages all facets of transportation information, develops theater highway regulation, traffic circulation, and maneuver and mobility support OPLANS, serves as executive agent for container, flatrack, and air pallet management, and enforces priorities set by the Command.





Senior Transportation Officer Qualification Course Mode Operations

Army motor transport units accomplish the following missions for nearly all operations:

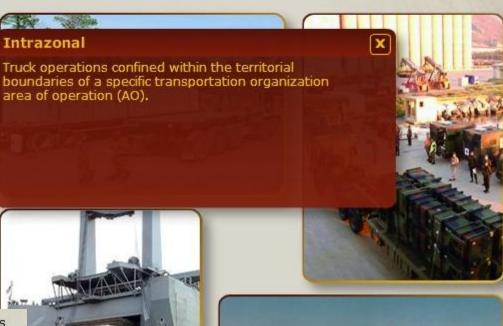
- Port clearance: moving cargo to an assembly area, marshalling yard, Central Receiving and Shipping Point (CRSP), or node terminal.
- Reception and onward movement of forces: supporting units located in or passing through their area of responsibility.
- Operational mobility: to displace and move as the mission requires.
- Theater-wide distribution and retrograde of personnel, supplies, and equipment.

Motor transport operations are characterized as either intrazonal or interzonal.

Motor transportation is the workhorse of the Army's support and sustainment structure, providing force mobility throughout the operational theater.

Motor transport units, together with other mode operators, terminal operators, and movement control planners, provide the theater's robust transportation capability.

Motor Transport





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Senior Transportation Officer Qualification Course Mode Operations

Motor Transport

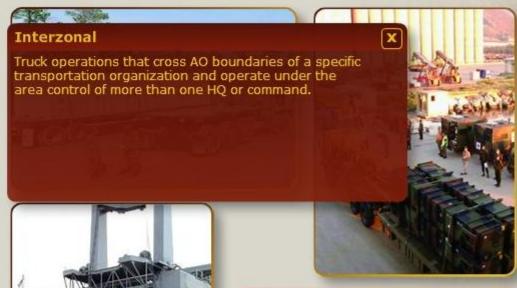
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Senior Transportation Officer Qualification Course Mode Operations

HHD, Transportation Motor Transport Battalion

The Transportation Motor Battalion provides:

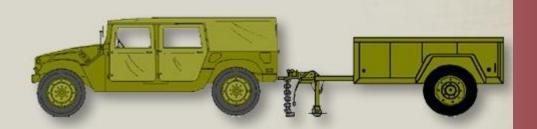
- Command, control, and technical supervision of assigned or attached transportation companies, detachments, and teams.
- Translation of transportation requirements from higher headquarters into specific vehicles or units required.
- Supervision of the operation of truck terminals, trailer transfer points, and trailer relay system.
- Coordination and evaluates highway traffic plans affecting transportation support including terrain, road condition, and security.

Within the Support Operations Section resides the Mode Operations Branch.

Mode Operations Branch

Provides staff control and supervision of the daily support missions of mode and cargo transfer operations in subordinate transportation units.

They keep the transportation support operations officer informed of the ability of subordinate units to perform their transportation support mission.





This unit is the parent headquarters for three to seven separate, functional transportation companies.

The Motor Transport Battalion will normally be assigned to a Sustainment Brigade, but could be employed independently, based upon mission, enemy, terrain and weather, troops and support available, time available, and civil considerations (METT-TC).

KEY EQUIPMENT

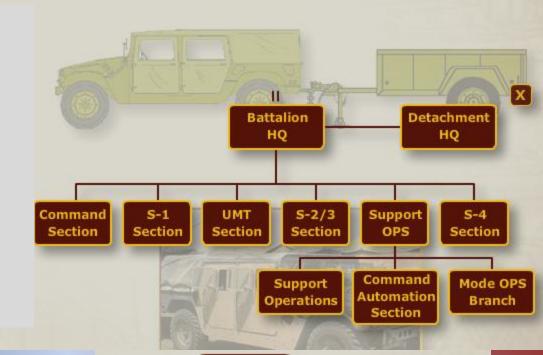
(13) M998A1, HIGH MOBILITY MULTIPURPOSE WHEELED VEHICLE (HMMWV)

(7) M1101 TACTICAL, TRAILER: 3/4-TON

(2) M1078, TRUCK, CARGO: LIGHT MEDIUM TACTICAL VEHICLE (LMTV)

(1) M1102, TRAILER, FLATBED: 1 1/4-TON LMTV

HHD, Transportation Motor Transport Battalion



MISSION

To command, control, and supervise units engaged in motor transport and terminal operations (less seaport).

PERSONNEL

Officer	Warrant Officer	Enlisted	Total
12	1	39	52
7		8	100



Senior Transportation Officer Qualification Course Mode Operations

Key Points

The following key points were discussed:

- Mode operations competencies
- Theater Sustainment Command Support Operations (SPO)
- Distribution Management Center (DMC), Mobility Branch of the SPO
- Motor Transport missions
- Transportation Motor Transport Battalion

The following mode operations key points were discussed: Mode operations core competencies, the Theater Sustainment Command Support Operations section. referred to as the (SPO), the Distribution Management Center, the Mobility Branch of the SPO, Motor Transport missions, and the Transportation Motor Transport Battalion.





Senior Transportation Officer Qualification Course Mode Operations

Quick Challenge



Select any motor transportation competencies listed below.

Select all that apply and then select Submit.

- ✓
- A. Trailer Transfer Points (TTPs)
- B. Theater airlift
- ✓
- C. Flatrack management
- D. Lighterage operations
- ✓
- E. Line-haul operations



Senior Transportation Officer Qualification Course Mode Operations

Highway Mode Operators

Highway Mode Operators consists of:

- Transportation Companies in the Corps and/or Sustainment Brigades
- . Trans Plts (from the Distro Co in the BSB)
- Operators in the Trans Section of the FSC (light units only)

Each type of motor transport company is equipped with vehicles that vary in type and design, and in their capabilities to support operations under a variety of conditions.

Planners must know the capability of each type of company when determining the proper mix to support any operation. Factors to consider include:

- Environmental factors of climate, weather, and terrain
- Operational factors such as the roadnet and highway surfaces or trafficability
- Tonnage requirements, type of cargo, and type or length of hauls



Motor transport companies are the workhorses of motor transportation.

They are basically organized in the same manner with a company headquarters, maintenance section, and three line platoons.



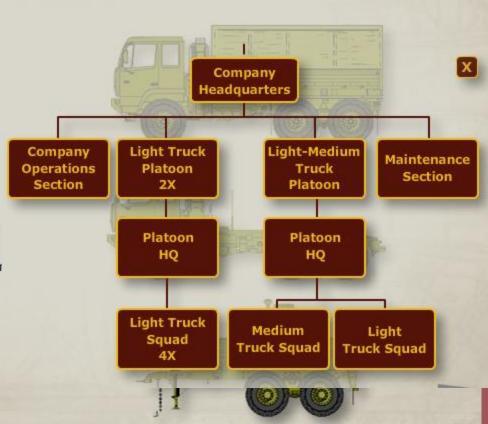
Senior Transportation Officer Qualification Course Mode Operations

Light and Medium Truck Companies

The Transportation Light and Medium Truck Companies are normally comprised of the following elements:

- Company Headquarters
- · Operations Section
- Two Light Truck Platoon Headquarters
- · Four Light Truck Squads
- Light/Medium Truck Platoon Headquarters
- Light Truck Squad
- · Medium Truck Squad
- Maintenance Section

The Transportation Light and Medium Truck Companies are normally attached to a Motor Transportation Battalion or a Combat Sustainn Support Battalion, referred to as (CSSB).



MISSION

Provide transportation support for the movement of bulk cargo, containers, and personnel by motor transport.

PERSONNEL

Contract of the Contract of th	- A		=
Officer	Warrant Officer	Enlisted	Total
5	1	165	171

KEY EQUIPMENT

(8) M1088 TRUCK, TRACTOR: MT

(40) M1083 TRUCK CARGO: MTV

(25) M1095 TRAILER, CARGO

CAPABILITIES

At Level 1, with an 86.0 percent task vehicle availability rate for 5-Ton Cargo Trucks and 85.0 percent task vehicle availability rate for the 5-Ton Tractor; operating on a two-shift basis, making four round trips per day (two per operating shift) in local hauls or two round trips per day (one per operating shift) in line hauls, this unit provides:

Non-containerized General Cargo	LOCAL HAULS	LINE HAULS
Cargo Truck	891 STONS	445 STONS
Semitrailer	238 STONS	119 STONS
Combined	1,129 STONS	564 STONS
20 foot containers	32	16



Senior Transportation Officer Qualification Course Mode Operations

The Transportation Medium Truck Companies-Cargo are normally comprised of the following elements:

- Company Headquarters
- Operations Section (The Operations Officer serves as the unit Movement Officer)
- Three Truck Platoon Headquarters
- Six Truck Squads
- Maintenance Section

In an emergency condition, this unit can transport 50 seated passengers per semitrailer.



MISSION

To provide transportation for the movement of containerized, non-containerized, palletized, dry and/or refrigerated containerized cargo, bulk water products, and bulk petroleum products.

PERSONNEL

Officer	Warrant Officer	Enlisted	Total
5	1	166	172

KEY EQUIPMENT

(120) M872A3 SEMITRAILER, FLATBED 40FT: BREAKBULK/CONTAINER TRANSPORTER 34-TON

(60) M915A1 TRUCK, TRACTOR: LINE HAUL C/S 50000 GVWR 6X4

CAPABILITIES

At Level 1, this unit provides:

87.5 percent vehicle availability, this unit performs continuous around the clock (two shifts per day) motor transport operations at the capabilities shown below:

Containerized Cargo	LOCAL HAUL	LINE HAUL
Containers 40 ft.	210	105
Containers 20 ft.	420	210
Non-Containerized	1,474 STONS	737 STONS
Ammunition	2,648 STONS	1,324 STONS

When attached to a Transportation Motor Transport Battalion, mediun trucks can transport 40-foot containers (one per tractor/semitrailer pe trip) or 20-foot containers (two per tractor/trailer per trip). This unit can transport bulk water only when attached to a Quartermaster Water Battalion equipped with semitrailer mounted

fabric tanks (SMFTS), or Hippo Tankracks. A trailer mounted with aa

SMFT cannot haul any other cargo.
This unit has the following water hauling capability:

		The same of the sa
CARGO	LOCAL HAULS	LINE HAULS
SMFTS (3,000 gal.)	636,000 Gallons	318,000 Gallons
SMFTS (4,750 gal.)	1,007,000 Gallons	503,500 Gallons
HIPPO TANKRACKS (2,000 gal.)	424,000 Gallons	212,000 Gallons



Senior Transportation Officer Qualification Course Mode Operations

Medium Truck Companies - Cargo (Corps)

The Transportation Medium Truck Companies-Cargo(Corps) are normally comprised of the following elements:

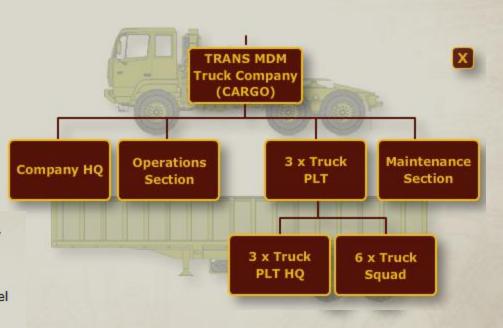
- Company Headquarters
- · Operations Section
- Three Truck Platoon Headquarters
- Six Truck Squads
- Maintenance Section

This unit is normally attached to a Transportation Motor Transport Battalion, or to a Combat Sustainment Support Battalion, under a Sustainment Brigade at Corps level.

The Transportation Medium Truck Company, (Cargo), at the Corps level, deploys early in all types of contingencies.

These truck companies must operate at platoon level and be capable of being self-sustaining.

This unit is normally attached to a Transportation Motor Transport Battalion, or to a Combat Sustainment Support Battalion, under a Sustainment Brigade.



MISSION

To provide transportation for the movement of dry and/or refrigerated containerized cargo, general non-containerized Cargo, and bulk water when organized under TOE 55728L100; bulk petroleum products when organized under TOE 55728L200; and ammunition when organized under TOE 55728L300.

PERSONNEL

Officer	Warrant Officer	Enlisted	Total
5	1	163	169

KEY EQUIPMENT

(120) M871A2 SEMITRAILER FLAT BED: BREAKBULK/CONT TRANSPORTER 22 1/2-TON

(48) M1088 TRUCK, TRACTOR: MTV W/E

CAPABILITIES

At 84.7 percent task vehicle availability rate, operating on a two-shift basis, making four round trips per day (two per operating shift) in local hauls or two round trips (one per operating shift) in line hauls, this unit provides:

CARGO	LOCAL HAULS	LINE HAULS
CONTAINER (Dry/Refrigerated)	203	102
NON-CONTAINERIZED (Palletized/Packaged)	974 STONS	487 STONS
WATER	304,920 Gallons	609,840 Gallons



Senior Transportation Officer Qualification Course Mode Operations

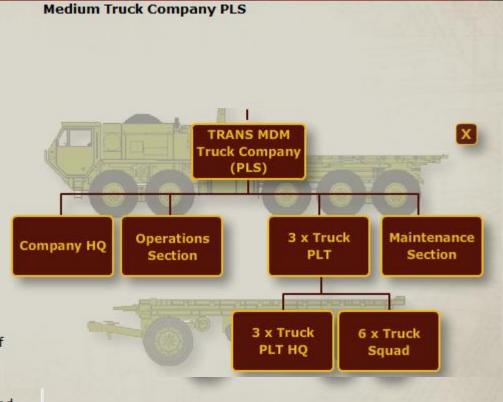
The Transportation Medium Truck Company - Palletized Load System (PLS) is normally comprised of the following elements:

- Company Headquarters
- · Operations Section
- Three Truck Platoon Headquarters
- Six Truck Squads
- Maintenance Section

This unit is normally attached to a Transportation Motor Transport Battalion or to a CSSB under a Sustainment Brigade at Corps level.

The combination of truck and trailer provides the combined payload capacity of 33 tons and is capable of conducting both line haul and local haul operations.

The Medium Truck Company with the palletized load system, or (PLS), consists of a prime mover truck, (the "tractor"), with an integral self-loading and unloading capability, a payload trailer, and a demountable cargo bed, referred to as a flatrack.



The tractor and trailer form a self-contained system that loads and unloads its cargo, without the need for forklifts or other material handling equipment.

A container handling unit, enables the PLS to pick up and transport ISO intermodal containers without using a flatrack.

MISSION

To provide transportation for the movement of both dry and refrigerated containerized cargo, general non-containerized cargo, and ammunition.

PERSONNEL

Officer	Warrant Officer	Enlisted	Total
5	1	164	170

KEY EQUIPMENT

(60) M1075 TRUCK, CARGO: HEAVY PLS TRANSPORTER 15-16.5-TON 10X10

(60) M1076 TRAILER: PALLETIZED, 16 1/2-TON, LOADING 8X20

CAPABILITIES

With a 90.5 percent task vehicle availability rate, operating on a two-shift basis, making four round trips per day (two per operating shift) in local hauls or two round trips (one per operating shift) in line hauls, this unit provides:

CARGO	LOCAL HAULS	LINE HAULS
CONTAINER (Dry/Refrigerated)	434	217
PALLETIZED CARGO	2,260 STONS	1,130 STONS
AMMUNITION	4,780 STONS	2,390 STONS



Senior Transportation Officer Qualification Course Mode Operations

Medium Truck Company POL (Corps)

The Transportation Medium Truck Company - Petroleum, Oils, and Lubricants (POL) is normally comprised of the following elements:

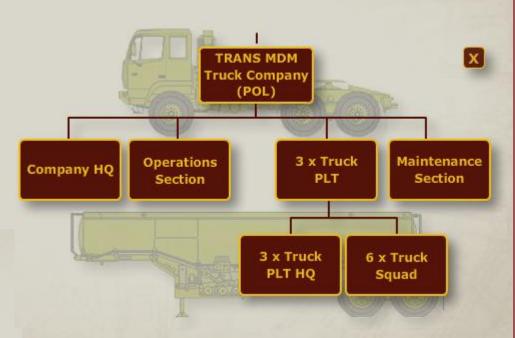
- Company Headquarters
- Operations Section
- Three Truck Platoon Headquarters
- Six Truck Squads
- Maintenance Section

This unit is normally attached to a Sustainment Brigade, or attached to a Petroleum Supply Battalion, Petroleum Pipeline and Terminal Operating Battalion, or a Combat Sustainment Support Battalion.

The Transportation Medium Truck Company, Petroleum, Oils, and Lubricants, (POL), at the Corps level, deploys early in all types of contingencies.

Due to the present operational environment, fuel consumption in the modern Army is tremendous, whether we are operating in an austere desert or a jungle environment.

Getting the right amount to the right place at the right time is a major sustainment challenge.



MISSION

To provide transportation for the movement of bulk petroleum.

PERSONNEL

Officer	Warrant Officer	Enlisted	Total
5	1	164	170

KEY EQUIPMENT

(60) M967A1 SEMITRAILER, TANK: 5,000 GAL BULK HAUL SELF-LOAD/UNLOAD W/E

(48) M1088 TRUCK, TRACTOR: MTV W/E

CAPABILITIES

With a 84.7 percent task vehicle availability this unit, operating on a two-shift basis, making four round-trips per day (two per operating shift) in local hauls or two round trips (one per operating shift) in line hauls is capable of transporting the following:

CARGO	LOCAL HAULS	LINE HAULS
PETROLEUM	1,016,400 Gallons	508,200 Gallons



Senior Transportation Officer Qualification Course Mode Operations

Combat Heavy Equipment Transportation (HET) Company

The Transportation Combat Heavy Equipment Transport (HET) Company is normally comprised of the following elements:

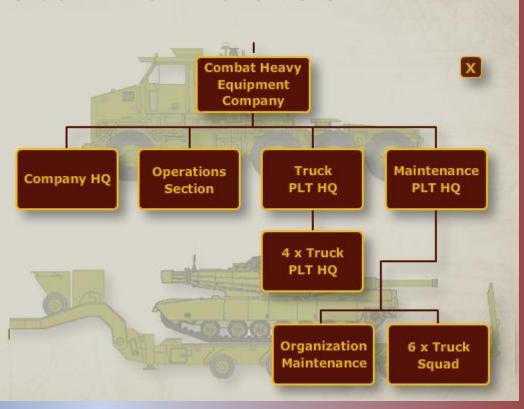
- Company Headquarters
- · Operations Section
- Three Truck Platoon Headquarters
- Four Truck Squads
- Maintenance Platoon Headquarters
- Organization and Direct Support Maintenance Sections

This unit is normally assigned to a TSC, Transportation Composite Group, or Transportation Motor Transport Battalion, depending on mission.

The Heavy Equipment Transport System (HETS) consists of the M1070 Truck Tractor, and the M1000 Heavy Equipment Transporter semi-trailer.

The HETS transports payloads up to 70 tons - primarily M1A1 Abrams tanks.

The M1070 tractor has front-and rear-axle steering, a central tire-inflation system, and cab space for six personnel, to accommodate the two HETS operators and four tank crewmen.



MISSION

To relocate heavy maneuver forces on the Battlefield.

PERSONNEL

Officer	Warrant Officer	Enlisted	Total
7	1	291	299

KEY EQUIPMENT

(96) M1070 TRUCK TRACTOR: HEAVY EQUIPMENT TRANSPORTER (HET)

(96) M1000 SEMITRAILER, LOW BED: 70-TON HEAVY EQUIPMENT TRANSPORTER

CAPABILITIES

A one-time lift of 86 tracked combat vehicles (one tracked vehicle per HET). Six of these units, operating simultaneously, can relocate a brigade-sized heavy maneuver force.

CAUTION: The Combat HET Company is designed to deploy with heavy combat forces. The operational and tactical location of the combat HET Company on the battlefield will cause maintenance requirements to accrue very early in the deployment phase. It is critical to have direct support capability organic to the HET Company to maintain combat readiness.



Senior Transportation Officer Qualification Course Mode Operations

Along a Main Supply Route (MSR), a transportation commander will place Trailer Transfer Points (TTPs) and Convoy Support Centers (CSC) at strategic locations between both ends of a line-haul system.

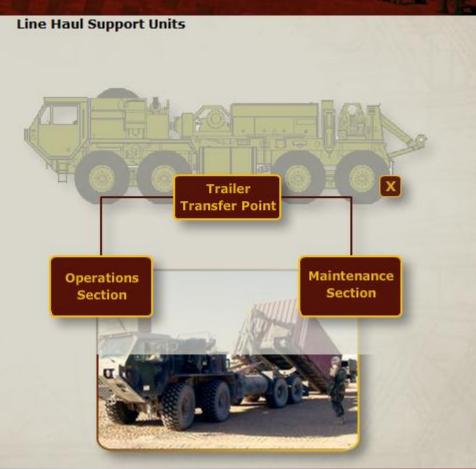
TTPs provide facilities for exchanging semitrailers, reporting (ITV), vehicle and cargo inspections, documentation, and dispatch procedures. They may also provide mess, maintenance, and other support.

Convoy Support Centers (CSC) provide mess, maintenance, crew rest facilities, and other personnel and equipment in support of convoys moving along Main/Alternate Supply Routes (MSR/ASR).

A Trailer Transfer Point operates on a two-shift basis to provide around-the-clock operations. It receives, segregates, assembles, and dispatches semi-trailers for convoys.

Control of the trailer interchange yard is maintained through the use of TC-AIMS II and MTS.

Convoy Support Centers are located along the main supply route, generally every 200 miles or as required by METT-TC. They will vary in the level of service they can provide.



MISSION

Operates a Trailer Transfer Point (TTP) supporting line haul and local haul motor transport operations.

This team is normally assigned to a Transportation Motor Transport Battalion.

PERSONNEL

Officer	Warrant Officer	Enlisted	Total
1	0	4	5

KEY EQUIPMENT

(4) SHUTTLE, TRACTOR: YARD DOG (YD) 46000 GVW 4X2

(1) M984A1 TRUCK WRECKER: TACTICAL 8X8 HEAVY EXPANDED MOBILITY W/WINCH

CAPABILITIES

At Level 1, this unit provides:

- Receives segregates, assembles, and dispatches up to 250 loaded or empty semitrailers and 125 tractors per day.
- Emergency refueling and repair of vehicles transiting the TTP.
- Inspection emergency repairs to up to 10 percent of transit vehicles and semitrailers with organic mechanics.
- Area recovery of disabled vehicles operating in the line haul operation.
- Prepares and maintains operational records and reports on organic equipment.
- · In-transit visibility (ITV) of cargo throughput.



Senior Transportation Officer Qualification Course Mode Operations

The following key points were discussed:

- Mode operators
- · Light and medium truck companies
- · Palletized system and POL truck companies
- · Heavy equipment transport companies
- · Line haul support units

The following motor operations key points were discussed: Mode operators, light and medium truck companies, palletized system and POL truck companies, heavy equipment transport companies, and line haul support units.





Senior Transportation Officer Qualification Course Mode Operations

Quick Challenge



Motor Transport Companies are equipped with different classes of vehicles. These vehicles vary in type and design, and in their capabilities to support operations under a variety of conditions.

Identify any factors that planners must consider when determining the proper transportation unit to support an operation. Select all that apply and then select Submit.



A. Environmental factors of climate, weather, and terrain



- B. Operational factors such as the roadnet and highway surfaces or trafficability
- C. Intermodal considerations regarding local law enforcement units
- D. Communications and MTV availability



E. Tonnage requirements, type of cargo, and type or length of hauls





Senior Transportation Officer Qualification Course **Mode Operations**

Rail Operations

Transportation is the core of strategic mobility, and rail operations are the backbone of any major deployment.

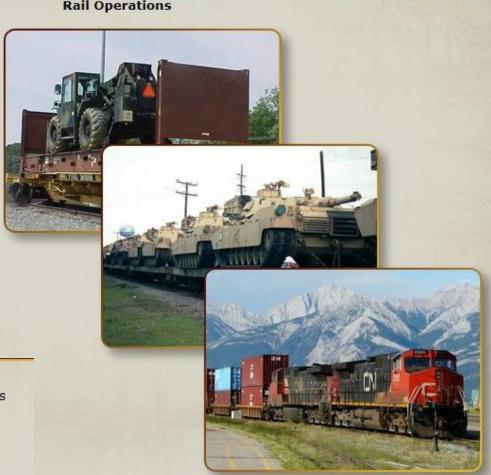
Rail transport operations provide operational capability without which the Modular Force would not be truly full-spectrum.

Within U.S. borders and in support of deployment, sustainment, and Homeland Security (HLS) operations, rail transport provides essential rapid, large capacity and surge movement capability to facilitate the projection of combat power.

Within the continental U.S., rail operations provide unmatched large capacity movement of heavy combat units, supplies, and equipment.

From installation to Port of Embarkation movements within the continental United States, to forwardstationed theaters, such as South Korea and NATO allies, rail movement contributes immensely of the deployment process on which rapid, flexible force projection depends.

A critical aspect of effective employment of rail transport capabilities is the ability of the Transportation Officer to effectively manage movements into and within a theater of operation, beginning with an assessment of rail infrastructure capacity.





Senior Transportation Officer Qualification Course Mode Operations

The Army's only U.S. rail unit, the 757th Transportation Railway

Battalion, is an Army Reserve unit located in Milwaukee, Wisconsin.

The 25th Transportation Battalion operates in South Korea and is organized with two regional movement control teams (RMCTs).

A Transportation Railway Battalion capabilities include:

- Operates and maintains a railway division of approximately 150 miles
- Dispatches all trains, supervises on-line operations, and operates rail stations and signal towers within a railway division
- Maintains a rotating stock of 19,700 tons of repair parts and railway supplies

The 757th Transportation Railway Battalion companies include the 226th Transportation Railway Operating Company in Massachusetts; the 1150th at Fort Sheridan, Illinois; the 1151st at Military Ocean Terminal, Sunny Point, North Carolina; and the 1152nd, in Milwaukee, Wisconsin.

The 757th Transportation Railway Battalion and its companies will be phased out by 2015.

The 25th Transportation Battalion still provides rail transportation service to U.S. forces in Korea.



MISSION

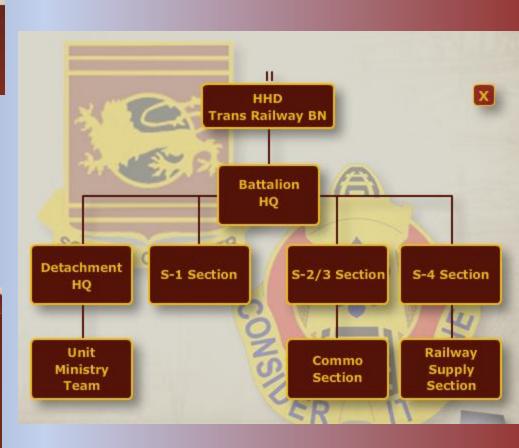
To command, control, plan for, and technically supervise three to seven railway operating companies.

PERSONNEL

Officer	Warrant Officer	Enlisted	Total
10	1	40	51

CAPABILITIES

- Provides command, control, planning, and technical supervision of three to seven railway operating companies
- Operates and maintains a railway division of approximately 150 miles
- Dispatches all trains, supervises on-line operations, and operates rail stations and signal towers within a railway division
- Maintains and repairs railway signal towers and railway land-line communications
- Maintains a rotating stock of 19,700 tons of repair parts and railway peculiar supplies daily





Senior Transportation Officer Qualification Course Mode Operations

Transportation Railway Operating Company

A Transportation Railway Operating Company is normally attached to a Railway Battalion within a Sustainment Brigade.

The major portion of battalion and company level railway personnel and equipment is involvement in yard and terminal operations.

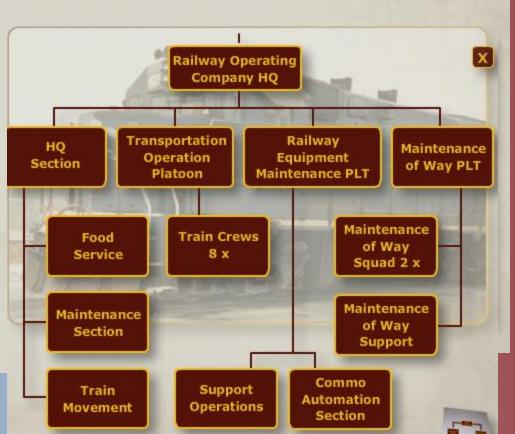
Yards may be located at railheads, depots, interchange points, ports, or terminals.

There are four primary functions of rail transport operations for U.S. Army Reserve Railway Operating Companies.

These functions include the following: train operation, maintenance of way, maintenance of equipment, and train control.

MISSION

To operate rail locomotives and trains, maintain and repair railtrack, and perform inspection and organizational maintenance on rolling stock and diesel-electric locomotives.



PERSONNEL

Officer	Warrant Officer	Enlisted	Total
5	0	117	122

MISSION

To operate rail locomotives and trains, maintain and repair railtrack, and perform inspection and organizational maintenance on rolling stock and diesel-electric locomotives.

PERSONNEL

Officer	Warrant Officer	Enlisted	Total
5	0	117	122

CAPABILITIES

- Operates a rail division of approximately 40-60 miles
- Operates locomotives and trains for yard, road, and incidental switching operations
- Provides eight train crews (daily) for road service and for yard, port, and rail terminal operations including switching and train makeup operations
- Maintains and repairs track and roadbeds
- Performs maintenance and inspection of 16 locomotives and 320 railcars
- Provides rail equipment maintenance contact teams
- Provides wrecked train support
- Dispatches all trains, operates railway stations and signal towers





Senior Transportation Officer Qualification Course Mode Operations

There are times when the Transportation Officer selects air mode over surface mode under the following circumstances:

- Air transportation is the only mode available.
- The overall cost of shipping via surface is greater than shipping via air.
- The materiel being shipped is of high value or a security risk.
- The nature of the cargo demands movement by air for other reasons (time sensitive or highly specialized).

Air Force strategic and theater airlift, as well as commercial fixed-wing assets capabilities include:

- Heavy drop and container delivery system (parachute or free drop)
- Low altitude parachute extraction system
- · Air land (most preferred)
- Adverse weather aerial delivery system
- Aerial bulk fuel delivery system

Strategic Air Operations





For movements conducted under the Joint Operations Planning and Execution System (JOPES), the Time Phased Force Deployment Data (TPFDD) identifies the movement mode. More on this in future lessons.

Airlift requests are categorized as either preplanned, (normally 72 hours in advance), or immediate (unanticipated or urgent).

Immediate requests (also known as emergency), by pass the normal logistics community and are processed directly through operations channels.



Senior Transportation Officer Qualification Course Mode Operations

Tactical Air Operations

A key planning consideration in Air Operations is whether the movement is tactical (combat) or non-tactical (administrative).

Tactical movements are organized, loaded, and transported to aid accomplishment of a tactical mission.

Army units plan for non-tactical movements unless they are conducting operations that anticipate hostile reception.

Use of organic Army helicopter assets is the most costly Army mode for the movement of supplies, but becomes the primary mode of transport when all others are ineffective due to austere or non-existent landing field limitations or physical restrictions.

Air assets may be requested from Joint or Coalition Forces, National Local Government, or sister services by mode managers.









Senior Transportation Officer Qualification Course Mode Operations

The following key points were discussed:

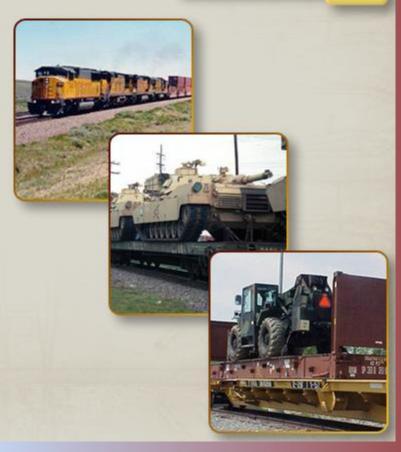
- Rail Operations
- Transportation Railway Battalion
- Transportation Railway Operating Company
- · Air Operations

The following key points were discussed: Rail Operations, the Transportation Railway Battalion, the Transportation Railway Operating Company, and Air Operations.

Key Points









Senior Transportation Officer Qualification Course Mode Operations

Quick Challenge



Within the continental United States, which mode of transportation operations is unmatched for the large capacity movement of heavy combat units, supplies, and equipment?

Select the best answer and then select Submit.

- A. Air Operations
- ✓
- **B. Rail Operations**
- C. Motor Transport Operations
- D. Sealift Operations





Senior Transportation Officer Qualification Course Mode Operations

Water Operations

After Strategic Sealift has occured, Army watercraft has an important role in theater for Marine Terminal and Logistics Over the Shore (LOTS) operations, coastal shipping, and riverine operations, and fall into two categories, lighterage and floating utility.

Lighterage are craft used to transport equipment, cargo and personnel between ships, from ship-to-shore or for intratheater transport.

Lighterage are further classified into conventional displacement (landing craft), or modular causeway systems (powered ferry), and Roll-On/Roll-Off (RO/RO) discharge facilities (RRDF).

Floating Utility craft perform operations incidental to water terminal operations. Watercraft in this category are harbor and ocean going tugs, pusher tugs, floating cranes, barges, and floating machine shops.

Ninety percent of all strategic lift into a theater will be by sealift.

But once in a port environment, Army watercraft provides the capability to supplement and support the strategic sealift, reducing the logistics backlog that can congest seaport discharge facilities.

However, where port facilities are sparse, damaged, or nonexistent, a Logistics Over the Shore, or LOTS operation, relies mainly on Army watercraft units.

The Army vessels and personnel that support these operations, will be introduced over the next few screens.









Senior Transportation Officer Qualification Course Mode Operations

Future Transportation Joint High Speed Vessel (JHSV)

The Joint High Speed Vessel (JHSV) is employed to move, maneuver, and reposition personnel, cargo, and equipment during intratheater lift, waterborne tactical and joint amphibious or riverine operations.

The JHVS supports the full spectrum of military operations by providing the ability to bypass degraded lines of communication, shorten MSRs, and conduct tactical operations from offshore and remote bases.

The JHSV supports the Commander in Chief's (CINC's) ability to build and sustain combat power by giving combat teams access to a wide variety of access points in remote and austere theaters of operation.

The Joint High Speed Vessel has communications equipment which enables combat troops to perform en-route planning and rehearsals, and contains other required equipment for command and control, self defense, NBC protection, medical, and unit maintenance.

The crew resides onboard, operates, and maintains the vessel.





MISSION

To perform high-speed waterborne transportation of personnel, cargo, and equipment, including fully operational combat teams, during intratheater lift, waterborne tactical and joint amphibious or, riverine operations.

	PERSONNEL		
Officer	Warrant Officer	Enlisted	Total
0	8	23	31

CAPABILITIES

- Self-sustainment for a period of 30-45 days with accommodations for the crew.
- Transports 1250 STONs of unit equipment or sustainment supplies, and 360 combat equipped troops in a single lift. This equates to a Force XXI Armor or Mechanized Infantry company.
- Echelon one combat health and food service support.
- Self-delivery to a theater of operations and ability to transit the Panama and Suez Canals.



Senior Transportation Officer Qualification Course Mode Operations

The Logistics Support Vessels (LSVs) are the Army's largest powered watercraft. They are designed to carry up to 2,000 tons of cargo from strategic sealift ships to shore during operations.

Logistics Support Vessel (LSV) missions include:

- Intratheater line-haul of unit deployment or relocation
- Tactical and sustained resupply to remote, undeveloped areas along coastlines and on inland waterways
- Support to discharge and backload of ships in Roll-On/Roll/Off (RO/RO) or Logistics Over the Shore (LOTS) operations.

The Logistics Support Vessel transports cargo, ISO containers, and rolling stock throughout a theater of operations or within inter-theater routes not otherwise serviced by the Military Sealift Command (MSC).

LSV Detachments also assist in Roll On/Roll Off or Logistics-Over-The-Shore operations, particularly with ISO container handling equipment, vehicular and other over-sized or over-weight cargo.

Logistics Support Vessel



MISSION

To provide transportation for vehicles, containers, and/or general cargo to remote, underdeveloped areas along coastlines and inland waterways; to support unit deployments, relocations, and port to port operations; to assist in discharging and backloading ships in a RO/RO or LOTS operation; and provide cargo transportation along coastal main supply routes (MSR).

Officer	Warrant Officer	Enlisted	Total
0	8	23	31

CAPABILITIES

- Is capable of self-sustainment for a period of 30-45 days with accommodations for a 31member crew
- Transports 2,000 STs of cargo with a range of 6,500 nautical miles
- Receives and discharges cargo through a bow ramp or stern ramp
- Beaches with a 1:30 offshore gradient with a maximum of 900 STs of cargo
- Deck area of 10,500 square feet can transport 21 to 24 M1A1 main Battle Tanks
- Provides combat health service and food service support
- Is capable of self-delivery to a theater of operations and meets the requirements to transit the Panama and Suez canals



Senior Transportation Officer Qualification Course Mode Operations

Transportation Heavy Watercraft Company

The LCU-2000 moves containers, general, and vehicular cargo.

This vessel and crew perform missions in LOTS operations in remote areas with austere shore facilities or unimproved beaches.

Because of its shallow draft, the LCU-2000 can carry cargo from deep draft ships to shore ports or areas too shallow for larger ships.

The Heavy Watercraft Company consists of:

- Company Headquarters
- · Two Boat Platoons
- Maintenace Platoon Headquarters
- Maintenance Section

The Landing Craft Utility, (LCU-2000), has a bow ramper the Roll-on/Roll-off of cargo, and a bow thruster to assist in beaching and beach extraction.

It can be self-deployed, or transported into a theater of operations aboard a Float On/Float Off vessel.



MISSION

To perform waterborne transportation of personnel, cargo and equipment during intratheater lift, water terminal, waterborne tactical and joint amphibious, riverine or logistics-over-the-shore (LOTS) operations.

PERSONNEL			1
Officer	Warrant Officer	Enlisted	Total
4	21	138	163

CAPABILITIES

- On a 24 hour basis, provide up to 8 landing craft (LCU-2000) for transport missions
- Each LCU-2000 can move 5 M-1 Main Battle
 Tanks or 24 each 20-foot containers
- Transport 2,800 short tons of cargo consisting of vehicles, containers, and/or general cargo
- Task vessels are self deployable when this unit is equipped with LCU-2000s



Senior Transportation Officer Qualification Course Mode Operations

Transportation Medium Boat Detachment

The Medium Watercraft Detachment, using the Landing Craft, Mechanized (LCM-8), transports cargo, troops, and vehicles from ship to shore or in a causway operation, or retrograde movements. It is also used in lighter and utility work in harbors.

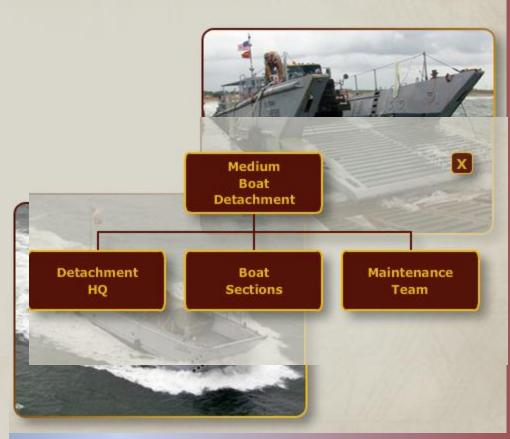
The LCM-8 is designed for use in rough or exposed waters and can be operated through breakers and grounded on the beach. The bow ramp allows RO/RO operations with wheeled and tracked vehicles.

The Medium Watercraft Detachment consists of:

- Detachment Headquarters
- . Two Boat Sections
- Maintenace Team

Capable of carrying 60 tons of cargo, the LCM-8 is a highly versatile workhorse for the amphibious force commander.

The LCM-8 may be attached to the U.S. Navy or Marine Corps to support joint amphibious, riverine or Logistics-Over-the-Shore (LOTS) operations.



MISSION

To perform waterborne transportation of personnel, cargo and equipment during water terminal, waterborne tactical and joint amphibious, riverine or logistics over the shore (LOTS) operations.

	PERSONNEL	-	
Officer	Warrant Officer	Enlisted	Total
2	1	71	74
	1	100	

CAPABILITIES

At Level 1, based on a 75 percent availability of landing craft, operating on a 24-hour, two shift basis, this unit is capable of:

- Transporting an average of 252 short ton (STONS) of non-containerized cargo based on an average of 42 STONS per landing craft daily.
- Transporting 120 20-foot containers per day based on one container per landing craft each making 20 trips daily.
- Transporting 1,200 combat equipped troops in one lift.



Senior Transportation Officer Qualification Course Mode Operations

Transportation Modular Causeway Company

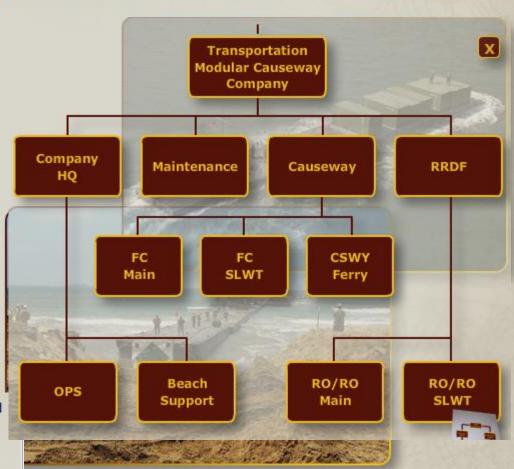
The Modular causeway System (MCS) is comprised of powered and non-powered floating sub-systems.

The Modular Causeway Company consists of:

- Company Headquarters
- · Operations Section
- · Beach Preparation Section
- Floating Causeway Main Segment
- Floating Causeway Side Loadable Warping Tug (SLWT) Segements
- Causeway Ferry
- Two RO/RO Discharge Platform Platoon Headquarters
- Two RO/RO Discharge Platform Main Segments
- Two RO/RO Discharge Platform SLWT Segments
- Maintenance Section

The Modular Causeway Company is normally assigned to a port or LOTS complex operated by a transportation terminal battalion, but may be attached to the U.S. Navy or U.S. Marine Corps to support joint amphibious, riverine or JLOTS operations.

The mission of the Modular Causeway System (MCS) is to provide a rapid means of transporting rolling stock, containerized, and breakbulk cargo from ship to shore during Logistics Over the Shore Operations (LOTS).



A key element in the causeway assembly process is the side-loadable warping tug, or SLWT, the craft used to move the causeway sections and maneuver the completed structure. The swiveling heads on its two water-jet propulsion units make it highly maneuverable.

MISSION

To provide movement support for cargo and equipment during intra-theater lift, water terminal, waterborne tactical and joint amphibious, riverine and logistics over the shore (LOTS) operations.

	PERSONNEL		DESCRIPTION OF
Officer	Warrant Officer	Enlisted	Total
5	1	174	180

CAPABILITIES

At Level 1, this unit provides:

- One Floating Causeway (FC) pier consisting of from one to 17 non-powered causeway sections (CSNP) (up to1,200 feet in length), with a dry bridge for the discharge of cargo and equipment from lighters directly to an unimproved shoreline or degraded fixed port facility.
- One Causeway Ferry (CF) consisting of one powered causeway section (CSP) and up to three non-powered causeway sections (CSNP) for moving rolling stock, break bulk, containerized cargo from ship to shore.
- Two Roll-On/Roll-Off Discharge Platforms (RRDF) consisting of up to 18 non-powered causeway sections (CSNP) each that interfaces between RO/RO ships and lighterage for the rapid discharge of rolling stock.
- Several variants of causeway section configuration to meet mission needs.



Senior Transportation Officer Qualification Course Mode Operations

Transportation Floating Craft Company

The Floating Craft Company deploys to a theater of operations to provide floating craft and harborcraft support along with heavy lift services for either pier or ships side.

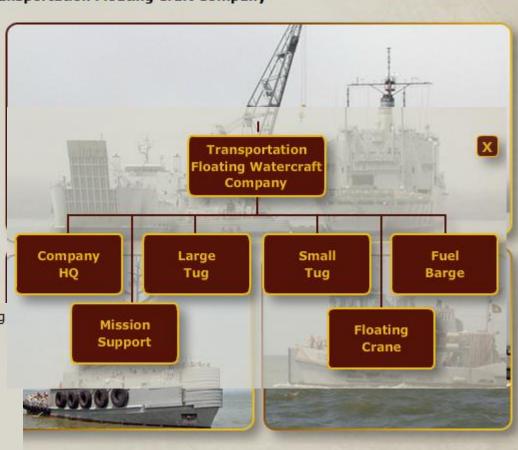
This unit is in direct support of the Transportation Terminal Battalion and employs several types of vessels, including a Barge Derrick (BD) crane, fuel barges, and large and smaller tugboats.

The unit is modular in design and can deploy with only the personnel required to support the initial deployment and build incrementally to a full company operation.

Army floating craft consists of lighterage and floating utility craft; such as tugboats, floating cranes, various types of barges, and modular causeways.

The floating crane provides additional lift capacity, when required.

The Floating Craft Company provides the critical link between offshore arrival of combat power, loaded aboard strategic sealift ships, and placing that power ashore in a ready-to-fight configuration.



MISSION

To perform floating craft and harborcraft operations during intratheater lift; water terminal; waterborne tactical; and joint amphibious, riverine or JLOTS operations.

	PERSONNEL	T.	
Officer	Warrant Officer	Enlisted	Total
2	10	75	87

CAPABILITIES

At Level 1, this unit provides:

- One Large Tug for ocean and coastal towing, salvage and recovery operations, general purpose harbor duties, and firefighting service.
- Two Small Tugs for tug services in support of water terminal and inland waterway operations.
- One Floating Crane to load and discharge heavy lift cargo that is beyond the capacity of ship's gear.
- One barge to transport up to 324 short tons of deck loaded dry cargo or 93,000 gallons of bulk fuel. Serves as a refueling point for Army watercraft operating in the area.



Senior Transportation Officer Qualification Course Mode Operations

Transportation Watercraft Maintenance Company

The Transportation Watercraft Maintenance Company supports a variety of watercraft that can be classified in two broad categories: lighterage and coastal harbor, and inland waterway vessels.

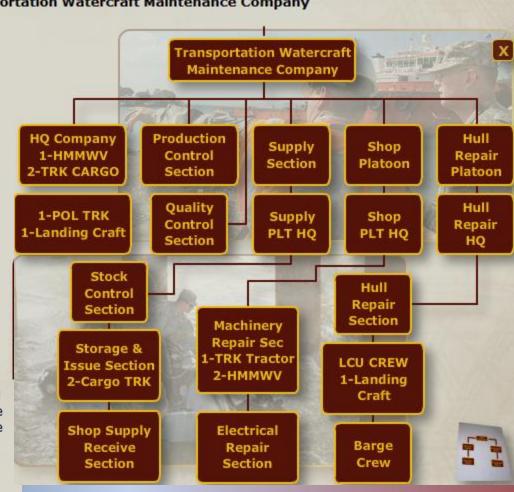
This unit will normally be employed to repair Army watercraft (tugboats, logistic support vessels (LSVs), landing craft mechanized (LCMs), barges, and causeway systems).

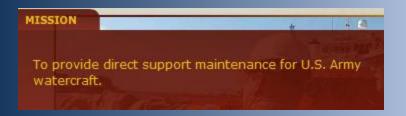
When required, Army Engineer divers, attached to a Seaport Terminal, will assist in repair and salvage operations.

It is assigned to the U.S. Transportation Command (USTRANSCOM), or attached to a Transportation Terminal.

The Watercraft Maintenance Company, is comprised of skilled machinists, electricians, carpenters, marine engineers, supply personnel, and others, who ensure the Army watercraft units remain ready to perform their vital support missions.

When required, Army Engineer divers, attached to a Seaport Terminal, will assist in repair and salvage operations.





	PERSONNEL		
Officer	Warrant Officer	Enlisted	Total
5	7	194	206

CAPABILITIES

- Provides up to 285,200 maintenance manhours for associated marine maintenance.
- Receives, stores, and issues approximately 9,000 line items of marine peculiar repair parts and items required for its mission and by supported units.
- Operates a machine shop for fabrication of unique parts.



Senior Transportation Officer Qualification Course Mode Operations

Key Points

The following key points were discussed:

- · Water Operations
- Logistics Support Vessel
- . Heavy and Medium Watercraft Units
- · Modular Causeway Company
- Floating Craft Company
- · Watercraft Maintenance Company

The following key points were discussed: Water Operations, the Logistics Support Vessel, the Heavy and Medium Watercraft Units, the Modular Causeway Company, the Floating Craft Company, and the Watercraft Maintenance Company.













Senior Transportation Officer Qualification Course Mode Operations

Quick Challenge



Army watercraft have an important role in theater for Logistics Over the Shore (LOTS) operations, coastal shipping, and river operations. What are the two categories of watercraft?

Select the best answer and then select Submit.

- A. Amphibious and utility lighterage
- B. LOTS and JLOTS



- C. Lighterage and floating utility
- D. Floating utility and breakbulk vessels



Senior Transportation Officer Qualification Course Mode Operations

Summary

Mode Operations encompass the backbone for Force Projection by U.S. forces throughout the globe.

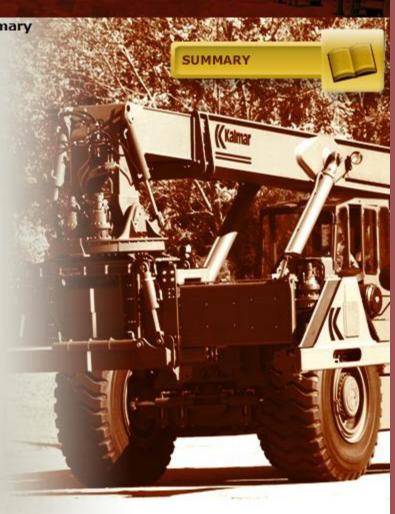
In this lesson, you were introduced to the various modes of transport, the mode operators, and their unit missions and capabilities.

As a Senior Transportation Officer, knowing the transport modes and capabilities of each, will greatly assist your efforts of planning and supervision of mission accomplishment.

In this lesson, you were introduced to the various modes of transport, the mode operators, and their unit missions and capabilities.

Whether transport of personnel, equipment, and supplies is by motor, rail, air, or water, the U.S. Army Transportation Corps has the capacity to move cargo to where it is needed.

We are the Transportation Corps; The Spearhead of Logistics. Nothing Happens Until Something Moves!





Senior Transportation Officer Qualification Course Terminal Operations

Motivator

In this lesson, you will learn about the Terminal Operations performed by the U.S. Transportation Corps and the transportation units that perform them.

Identifying Terminal Operations by various Army transportation units will further enhance your understanding of U.S. Transportation capabilities.

As a Senior Transportation Officer, your application of this knowledge will help you and others to accomplish transportation missions.

In this lesson, you will learn that Terminal Operations, whether at a fixed seaport, transportation hub, or inland facility, serve as key players in support of deployment, reception, and onward movement of U.S. forces and its sustainment.

As a Senior Transportation Officer, your knowledge of the units that operate within a terminal environment and their missions and capabilities, is critical to the efficient flow of personnel and equipment through the terminal on to their final tactical area of responsibility.





Senior Transportation Officer Qualification Course Terminal Operations

Lead-in

Reception from strategic lift is implemented at or near designated air and seaports of debarkation, normally under control of the combatant commander.

During the initial period of deployment, aerial terminals receive all that is not prepositioned or available from the host nation. Then the first surge sealift ships begin to arrive, dramatically increasing forces.

embarkation

Airlift remains a critical element regarding delivery of personnel, but most unit equipment to build the combat power arrives through seaports.



The combination of strategic airlift, sealift, and prepositioned equipment, referred to as the Strategic Mobility Triad, provides the capability to respond to contingencies.

During the early stages of a deployment, strategic airlift is the primary means of moving forces, and remains so until the sea line of communication is established.

Therefore, strategic sealift normally moves the majority of unit equipment identified for deployment.

and integration

LEAD-IN

Even with Army prepositioned stocks present in theater, there must be transporters to offload and process the equipment to their respective units as soon as possible.



lesson.

Terminals.

transportation units that operate within the Theater, to include: Marine Terminals, Air Terminals, and Inland



Senior Transportation Officer Qualification Course Terminal Operations

Competencies - Terminal Operations

Modular Army cargo organizations that operate transportation terminal operations possess these key capabilities:

- Multi-modal cargo operations
- · Inter-modal operations
- Container management
- Operations at access points and nodes
- · In-transit visibility
- Processes to maximize throughput capacities
- Automated cargo documentation
- Air Terminal Movement Control Teams (ATMCTs)
- · Arrival/Departure Airfield Control







The Modular Army depends on terminal operations for force projection.

Terminal functions include reception, discharge, transfer, storage, and clearance activities.

Army Transportation units must be capable of placing fully-capable cargo handling equipment, cargo marshalling, and port clearing capabilities, at any point across the range of military operations.



Senior Transportation Officer Qualification Course Terminal Operations

The three types of seaports most often encountered in a theater are:

- Fixed ports (improved)
- Unimproved ports (denied or degraded)
- · Bare beach (no port)

The Surface Deployment and Distribution Command (SDDC) serves as the single port manager with operational control (OPCON), and directs water terminal operations to include supervising contracts, cargo documentation, supercargo management, security operations, and the overall flow of information through the Transportation Terminal Group (TTG) and the Transportation Terminal Battalion.

The three types of seaports most often encountered in a theater are: fixed ports, unimproved ports, and bare beach.

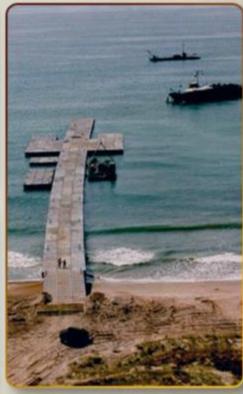
Activities at seaports are normally joint and multinational in nature.

Seaports serve as ports of debarkation for arriving forces, and simultaneously as ports of embarkation for forces deploying to other theaters, units returning to home base for reset, and retrograde of equipment.

Types of Seaports









Senior Transportation Officer Qualification Course Terminal Operations

Deployment and Distribution Support Battalion

The Deployment and Distribution Support Battalion (DDSB), normally a United States Army Reserve (USAR) headquarters, is designed to command, control, and technically supervise terminal companies and detachments operating at installations and seaports.

The strength of the DDSB is concentrated in its deployment expertise.

Each battalion will have from one to three DDS Teams and a Terminal Management Team integral to it.

The attachment of Port Management Teams and Terminal Supervision Teams to the Deployment and Distribution Support Battalion, increases terminal management capabilities.

Deployment and Distribution Support Teams assist units with deployment planning, staging, and preparation of unit equipment and personnel for worldwide movement by surface or air.

They also provide deployment assistance to the Brigade Mobility Officer or Installation Transportation Officer.



MISSION

Provide deploying units with pre-deployment assistance/execution of all required deployment/sustainment documentation and tacking of documented cargo in the theater of operations.



Can be made up of joint services personnel and size is dependent on METT-TC.

CAPABILITIES

The DDSB:

- Commands and controls the DDSTs, which provide technical deployment related support to deploying units worldwide, and provide container management in theater.
- Commands and controls surface mobility units performing terminal operations in a SPOE/SPOD.
- Commands and controls USAR Terminal Management Teams engaged in supervising and managing civilian and contractor operations in a SPOE/SPOD.
- Assists deploying units worldwide by providing DDSTs to deploying unit locations.
- · Supports port opening operations.

Journal Entry

Remarks by Lt.Col James Utley and Battalion Sergeant Major Bryan L. Elder Unit Mission Joint Base Balad, Iraq

"We are responsible for three major functions, the biggest one being redeployment support. We input everything on the transportation coordinators' automated information management system, TC-AIMS II, which is the system all units use to process all the equipment

We will handle all units' equipment that redeploys out of Iraq including every Brigade Combat Team in the country. The other two functions include container management and terminal operations. This is part of a relatively new program called "door-to-door" redeployment.

What we do is hire civilian contractors to pick up the equipment from units scheduled to redeploy, wash their equipment, and load it on the ship to expedite it back to their home stations. We are responsible for almost 60 percent of all equipment in Iraq that has to be retrograded back to the states."



Senior Transportation Officer Qualification Course Terminal Operations

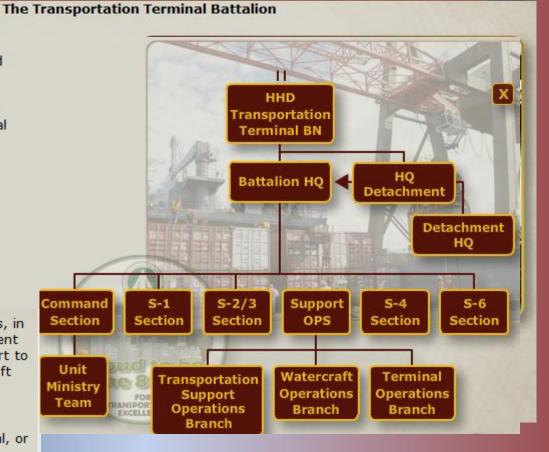
The Transportation Terminal Battalion is an active component Surface Deployment and Distribution Command (SDDC) TDA unit, exercising initial command and control authority over units conducting port operations, and falls under the Transportation Terminal Group.

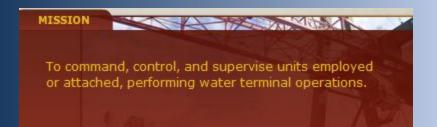
It is designed to conduct surface deployment, distribution, and water terminal port operations directly supporting the warfighter in its assigned area of responsibility.

It serves as the Single Port Manager (SPM) of a strategic seaport.

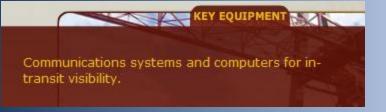
Seaport operations are similar to airport operations, in that once the vessels are off-loaded; unit equipment is moved to temporary holding areas within the port to be configured into convoys, rail loads, or watercraft transport.

Unit equipment clearing the port moves to an intermediate staging base, an inland water terminal, or directly to the Tactical Assembly Area.









CAPABILITIES CAPABILITIES

The Transportation Terminal Battalion:

- Plans, establishes, and conducts port operations to include cargo reception, staging, load planning, and vessel load/discharge operations.
- Commands and controls Terminal Management Teams engaged in supervising and managing civilian contract operations at a SPOE/SPOD.
- Transition from command and control of TOE terminal operating units to managing and supervising civilian contract capabilities at SPODs/APODs.
- Provides a port common operational picture.
- Serves as the SPM of a strategic seaport.



Senior Transportation Officer Qualification Course Terminal Operations

Joint Task Force - Port Opening (JFT-PO)

The planning and execution of rapid port openings are essential for expeditionary operations.

The Joint Task Force-Port Opening (JTF-PO) and the Rapid Port Opening Element (RPOE), are tasked to open ports and establish the initial distribution network.

Their duties include:

- APOD/SPOD assessment
- Distribution network assessment
- · Establishment of command and control (C2) connections with the Joint Deployment Distribution Operations Center (JDDOC)
- · APOD/SPOD opening and initial operation
- · Distribution node management
- · Cargo and passenger transfer operations and cargo movement to distribution nodes
- Movement control including coordination for onward movement of arriving cargo and passengers

In order to promote and refine "jointness", USTRANSCOM subsequently developed a concept for a joint standing task force that would deploy under the TRANSCOM commander's authority - The Joint Task Force-Port Opening unit.

This unit combines U.S. Air Force, Navy, and Army capabilities to provide USTRANSCOM and the theater commander with a ready-to-deploy, trained force for opening ports and establishing the initial distribution

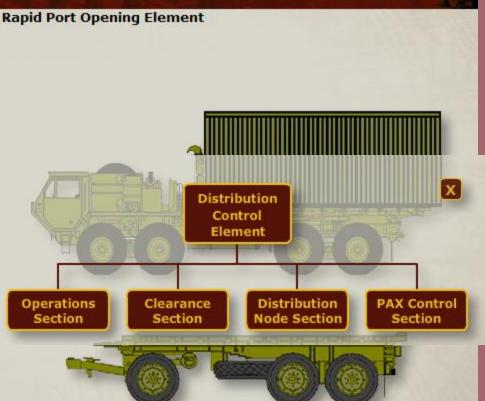




Senior Transportation Officer Qualification Course Terminal Operations

The functions of each Rapid Port Opening Element (RPOE) component are as follows:

- Distribution Control Element: Provides senior Army subject matter expertise.
- Operations Section: Provides overall management of mission requirements and training.
- Clearance Section: Loads flatracks, prepares new cargo manifests as required, and documents cargo and passengers.
- Distribution Node Section:
 Receives, stages, and accounts for arriving cargo. Maintains cargo accountability and ITV status.
- PAX Control Section: Receives and coordinates movement of personnel.



As the surface piece of U.S. Transportation Command's Joint Task Force - Port Opening unit, the Rapid Port Opening Elements (RPOEs) deploy as part of a joint expeditionary logistics force to establish a port of debarkation and forward distribution node.

The Surface Deployment and Distribution Command's newest units are a great example of how we have adapted to provide the best deployment and distribution support possible.

The RPOEs are first responders: they are prepared to deploy on short notice to establish air and sea ports of debarkation in austere environments and to provide crucial in-transit visibility for the joint force.

MISSION

The mission of the Rapid Port Opening Element Detachment is to receive and move cargo and personnel to a marshalling area for distribution and/or movement forward.

PERSONNEL

Officer	Warrant Officer	Enlisted	Total
6	1	48	55

KEY EQUIPMENT

(4) TRAILER, PLS, PALLETIZED LOADING

T93761 A TRAILER: PALLETIZED LOADING 8X20

(4) TRUCK CARGO: HEMTT, TACTICAL 8X8 HEAVY EXPANDED MOB W/LHS

(2) TRUCK LIFT: FORK VARIABLE REACH ROUGH TERRAIN

(2) INTERROGATOR SET: AN/TYX-1

CAPABILITIES

At Level 1, this unit provides 24 hour capability to:

- Receive, trans-load, and move 560 short tons onto surface transport vehicles when 90% of cargo arrives on 463L pallets and move to a distribution point or marshalling area up to 10 Km from the port.
- Receive and coordinate transportation for up to 600 arriving passengers.
- Operate one forward marshalling area up to 10 Km from port.
- Provide ITV for cargo/passengers at POD, distribution node, or marshalling area.



Senior Transportation Officer Qualification Course Terminal Operations

Transportation Theater Opening Element

The Transportation Theater Opening Element (TTOE) provides staff augmentation to a sustainment brigade headquarters engaged in theater opening operations.

The TTOE provides functional expertise and supervision of units engaged in force reception and distribution operations by:

- Monitoring movements programs, maintaining operational status, and committing transportation assets in support of RSOI operations.
- · Advising on the use of motor, air, and rail transport assets, and monitoring mode operations.
- · Advising on terminal and watercraft operations and providing terminal infrastructure assessments.

Theater opening is perhaps the most significant initial function to be performed in a theater of operations.

Its efficient and effective execution enables the rapid buildup and employment of combat power.



MISSION

Provides staff integration to the Sustainment Brigade Headquarters or Deployable Command Post/Sustainment Command (Expeditionary) engaged in theater opening operations.

	PERSONNEL	110	
Officer	Warrant Officer	Enlisted	Total
18	2	34	54



CAPABILITIES

Transportation Theater Opening Element:

- Augments a Sustainment BDE giving it the capabilities required to open a theater of operations.
- Establishes the initial distribution network and provides sustainment support to three BCTs.
- Conducts minimum essential early-entry operations prior to employment of full theater opening capabilities.
- The Sustainment BDE (TO) can command, control, provide staff supervision of, plan for, and employ units engaged in support or sustainment of the following theater opening operations: The Sustainment BDE (TO) can command, control, provide staff supervision of, plan for, and employ units engaged in support or sustainment of the following theater opening operations:
 - · Force Reception and Distribution operations
 - Communications, force protection, intelligence, and civil-military operations
 - Engineer, maintenance, and medical support
 - Soldier Support, to include all life support services and human resource operations
 - Financial Management



Senior Transportation Officer Qualification Course Terminal Operations

The Seaport Operations Company (SOC) functions in the following ways:

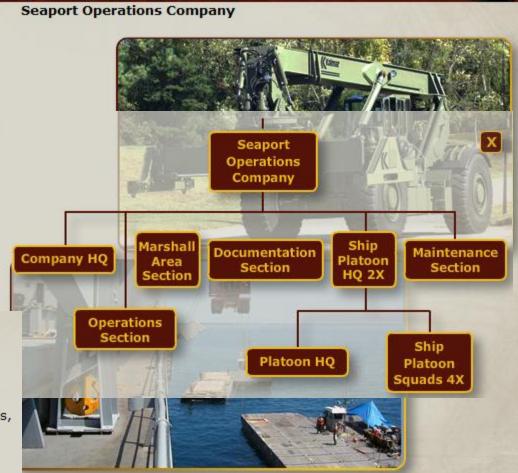
- Performs seaport terminal service operations
- Plans and forecasts operations in support of Port Commander or supported unit
- Perpetuates cargo documentation and redocuments diverted or reconsigned cargo
- Operates the cargo marshalling area

The SOC also coordinates seaport clearance and onward movement.

The Seaport Operations Company discharges and loads cargo and vehicles at fixed seaports or in logistics-over-the-shore operations.

In addition, the unit receives documentation of all cargo handled by the company and maintains records, reports, and logbooks.

There have even been occasions where Seaport Operations Companies have been found performing their mission at inland terminal hubs in support of the overall mission.



MISSION

To perform seaport terminal service operations to discharge and load containerized/non-containerized cargo and wheeled/tracked vehicles in fixed seaports or in logistics-over-the-shore (LOTS) sites; coordinates seaport clearance and onward movement with supporting Movement Control and Motor Transportation units.

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PERSUNNEL		The Print of the Land	
Officer	Warrant Officer	Enlisted	Total
4	1	202	207

(12) Kalmar Rough Terrain Container Handler (RTCH) (6) 10K (ATLAS) Variable Reach- Rough Terrain Forklift (2) 4K Forklift (10) Tractor 5 TON (4)HEMTT-LHS (1) 65 Ton Crane, Wheel Mounted :Hyd Rough Terrain (RTCC) (16) Semitrailer 34 Ton

CAPABILITIES

At Level 1, this unit provides ship squads to operate ships equipment on a two-shift, "around-the-clock basis". Operating in a fixed seaport or LOTS operation, this unit can accomplish the following:

Fixed Seaport	Lots Operation
375 containers	150 containers
1,875 short tons breakbulk	750 short tons breakbulk
750 Wheeled/Tracked Vehicles	450 Wheeled/Tracked Vehicles



Senior Transportation Officer Qualification Course Terminal Operations

The Port Management Team (PMT) will deploy to a theater of operations to provide single ship, dual shift support for vessel upload or offload operations on a 24 hour basis for management of contract or Host Nation (HN) labor.

The PMT will normally be attached to and operate under the control and direction of, and be fully integrated into, a Terminal Supervision Team.

The Port Management Team can perform vessel manifesting and stow planning, using the Worldwide Port System, and can track any cargo entering or leaving a port or terminal.

Port Management Team



MISSION

To manage, supervise, administer and /or monitor vessel and seaport operations performed by contracted or other Host Nation (HN) labor forces.

	PERSONNEL Warrant				
Officer	Warrant Officer	Enlisted	Total		
2	0	22	24		

KEY EQUIPMENT

COMPUTER SYSTEM DIGITAL: AN/PYQ-10(C)

DATA TRANSFER DEVICE: AN/CYZ-10

CAPABILITIES

At Level 1, this unit provides:

- Supervision, management, administration, or monitoring contract labor or HN support at a sea or inland-water port area in a theater of operations for stevedore and related terminal services.
- Single ship, dual-shift support for vessel upload or offload operations on a 24 hour basis.
- Limited documentation capability for single ship operations (less than Large, Medium Speed (LMSR), Roll-On, Roll-Off in size, e.g. conventional RO-RO ship).
- Vessel manifesting, stow planning, and tracking of cargo entering or leaving a port or terminal.
- The capability to process unit equipment lists for redeploying unit equipment and cargo.



Senior Transportation Officer Qualification Course Terminal Operations

The Harbormaster Detachment performs the following functions:

- Offers command and control of the detachment
- Conducts operational control over Army vessels and lighterage
- Provides technical support to watercraft units

The unit also establishes safety procedures and maintains communications for watercraft units.

Their headquarters is located within the Harbormaster Command and Control Center (HCCC).

The Harbormaster Detachment is essential in providing command and control of marine-related activities in support of the discharging and loading of cargo, fuel, and lighterage control. They are the traffic cop within the harbor.

Their headquarters is located within the Harbormaster Command and Control Center.

In addition, this unit supports shore-to-shore cargo operations and assists with vessel repair and services.



MISSION

To provide 24 hour operational control for Army vessels conducting intra-theater lift, water terminal, inland waterway and joint amphibious, riverine, and logistics over the shore operations.

	PERSONNEL		
Officer	Warrant Officer	Enlisted	Total
0	2	19	21

KEY EQUIPMENT

Harbormaster Command and Control Center (HCCC)

Radio communication systems and ANTENNA GROUP: OE-254()/GRC

FM Marine Band Radios

CAPABILITIES

At Level 1, this unit provides 24 hour operational control for Army vessel movements during intratheater lift; water terminal; inland waterway and joint amphibious; riverine and logistics-over-theshore (LOTS) operations; short and long range vessel communications; operation of the lighterage control center; and staff expertise for watercraft operational planning and maintenance.



Senior Transportation Officer Qualification Course Terminal Operations

Key Points

The following key points were discussed:

- Terminal operations core competencies
- · Types of seaports
- Deployment and Distribution Support Battalion
- Transportation Terminal Battalion
- Joint Task Force-Port Opening (JFT-PO)
- Rapid Port Opening Element (RPOE)
- Transportation Theater Opening Element (TTOE)
- Seaport Operations Company (SOC)
- Port Management Team
- Harbormaster Detachment

The following terminal operations key points were discussed: terminal operations core competencies; the three types of seaports; the functions of the Deployment and Distribution Support Battalion; the Transportation Terminal Battalion; the Joint Task Force-Port Opening unit; the Rapid Port Opening Element; the Transportation Theater Opening Element; the Seaport Operations Company; the Port Management Team; and the Harbormaster Detachment.













Senior Transportation Officer Qualification Course Terminal Operations

Quick Challenge



Which terminal operations unit serves as the Single Port Manager (SPM) of a strategic seaport?

Select the best answer and then select Submit.

- A. Seaport Operations Company (SOC)
- **B. Transportation Terminal Battalion**
- C. Deployment and Distribution Support Battalion (DDSB)
- D. Rapid Port Opening Element (RPOE)
- E. Transportation Theater Opening Element (TTOE)



Senior Transportation Officer Qualification Course Terminal Operations

Quick Challenge



Which terminal operations unit provides transportation functional expertise for staff planning and supervision of units engaged in force reception and distribution operations?

Select the best answer and then select Submit.

- A. Seaport Operations Company (SOC)
- **B.** Transportation Terminal Battalion
- C. Deployment and Distribution Support Battalion (DDSB)
- D. Rapid Port Opening Element (RPOE)
- E. Transportation Theater Opening Element (TTOE)





Senior Transportation Officer Qualification Course Terminal Operations

The Aerial Port of Debarkation (APOD) serves as the primary port of entry for all deploying personnel, as well as for early entry forces normally airlifted into theater together with their equipment.

Reception at the APOD is coordinated by a Contingency Response Element (CRE) and an Arrival and Departure Airfield Control Group (A/DACG).

Deployment by air is often constrained by the capabilities of the arrival airport more often than a shortage of aircraft.

Issues such as concurrent civilian use, competition for landing and takeoff slots, ramp space, number of aircraft on the ground at one time, and political restrictions limit its use to military aircraft.

More on Air Operations in a later lesson.

Responsibility for Aerial Port of Debarkation functions is divided between the U.S. Air Force and the Army, with the Airmen responsible for airfield operations including air terminal control, loading, unloading, and servicing of aircraft.

The main areas of the Aerial Port of Debarkation are the off-load ramp, the holding area, and the unit marshalling area. **Air Terminals**



The Army is responsible for clearing personnel and cargo off the tarmac, and for required logistics support for transiting units.

More on Air Operations in a later lesson.



Senior Transportation Officer Qualification Course Terminal Operations

Arrival / Departure Airfield Control Group

The Arrival and Departure Airfield Control Group (A/DACG) coordinates and controls loading and offloading of units for arrival, departure, deployment, or redeployment.

The Arrival Airfield Control Group (AACG) performs the following functions:

- Coordinates with the arriving unit and the Contingency Response Element (CRE)
- Provides off-load teams and support equipment to the CRE as required
- Escorts the chalks to the holding area and assists the unit in assembling and moving to the marshalling area
- Organizes movement of aircraft pallets to the unit marshalling area for pallet breakdown

The Arrival / Departure Airfield Control Group is an ad hoc Army organization committed to supporting units departing or arriving by air.

In particular, the Arrival Airfield Control Group helps units with reception at an aerial port of debarkation.



MISSION

To support Army units departing or arriving by air.

PERSONNEL

Each group will be made up of at least a command and control element, and other administrative and support personnel as determined by the size and scope of the operation.

Nonetheless, approximately 35-40 personnel are required to operate a departure airfield support activity on a 24-hour basis.

Elements of a Movement Control Team (MCT) and an Inland Cargo Transfer Company (ICTC) often operate the A/DACG; however, almost any unit can do so with the properly trained personnel and equipment.

KEY EQUIPMENT

- (2) M915 Tractor and M872 Trailer or civilian equivalent
- (2) 10K Rough Terrain Forklift
- (2) Tine Extenders



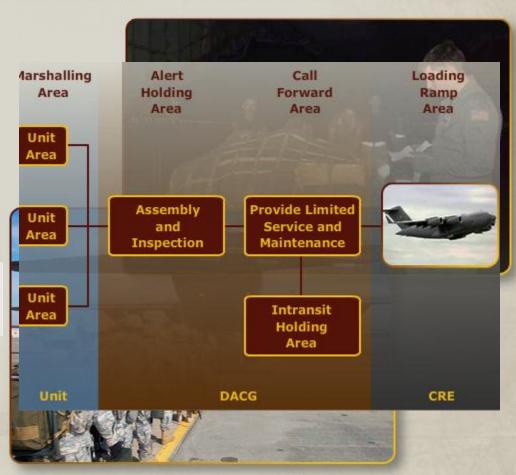
Senior Transportation Officer Qualification Course Terminal Operations

Arrival / Departure Airfield Control Group (Cont)

The Departure Airfield Control Group (DACG) performs the following functions:

- Coordinates with the deploying unit and the Contingency Response Element (CRE)
- Calls aircraft loads forward from the marshalling area and assumes control in the alert holding area
- Reviews HAZMAT documentation and load plans
- Organizes Materials Handling Equipment (MHE) support

The Departure Airfield Control Group, assists with load planning; conducts safety briefings; and escorts chalks to the ready line.



MISSION

To support Army units departing or arriving by air.

PERSONNEL

Each group will be made up of at least a command and control element, and other administrative and support personnel as determined by the size and scope of the operation.

Nonetheless, approximately 35-40 personnel are required to operate a departure airfield support activity on a 24-hour basis.

Elements of a Movement Control Team (MCT) and an Inland Cargo Transfer Company (ICTC) often operate the A/DACG; however, almost any unit can do so with the properly trained personnel and equipment.

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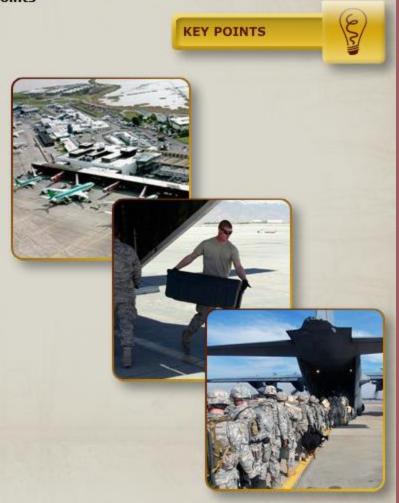
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Key Points

The following key points were discussed:

- Air Terminals
- · Arrival Airfield Control Group
- · Departure Airfield Control Group

The following key points were discussed: Air Terminals; the Arrival Airfield Control Group; and the Departure Airfield Control Group.





Senior Transportation Officer Qualification Course Terminal Operations

Quick Challenge



A Contingency Response Element (CRE) and ____ coordinate reception at the Aerial Port of Debarkation (APOD).

Select the best answer and then select Submit.

- A. Inland Cargo Transfer Company (ICTC)
- B. Arrival and Departure Airfield Control Group (A/DACG)
- C. Harbormaster Detachment
- D. Rapid Port Opening Element (RPOE)





Senior Transportation Officer Qualification Course Terminal Operations

Terminal Supervision Team

As part of port or inland terminal operations management, the Terminal Supervision Team (TST):

- Supervises and administers contracts for stevedores, inland waterway, and highway/rail transport activities.
- Supervises cargo documentation procedures and operates associated data processing equipment.
- Provides direction and management for the operations of three multi-modal Operations/Documentation Teams.

When operating at a sea or inland water port, the TST will normally be augmented with a Port Management Team.

Combined, this enhanced unit operates primarily at water terminals ranging from degraded to improved commercial ports.







The Terminal Supervision Team offers transportation expertise for: contract administration and supervision; receives and distributes highway motor transport missions; assigns cargo handlers; posts and controls guards to prevent pilferage and vandalism of cargo and equipment; and plans work schedules for terminal operations, airfield arrival/departure control groups, and container trailer transfer points.

MISSION

To provide cargo and personnel movement documentation and in-transit visibility (ITV) services in support of contracted terminal operations and/or terminal supervision.

PERSONNEL

1 20		and the second second		
Officer	Warrant Officer	Enlisted	Total	
3	0	18	21	

KEY EQUIPMENT

Computer Systems

Optical Reader Data Entry (OMC AMS Reader)

Enhanced Microcomputer Carryaway (WPS)

CAPABILITIES

At Level 1, operating on a two-shift basis, this team provides:

- Contract administration and supervision at seaport and other terminal areas in a theater of operations for stevedore and related terminal services.
- Inland waterway, highway and railway transport services in support of vessel operations, vessel manifesting, stow planning, and contract clearance activities.
- Supervision of multi-modal contract terminal operations.
- Direction and management for the operations of three multi-modal Operations / Documentation Teams.
- Coordination and oversight of the loading, offloading, and trans-shipment of cargo through all modes of conveyance by contracted laborers as supervised by multimodal teams.



Senior Transportation Officer Qualification Course Terminal Operations

Automated Cargo Documentation

The Automated Cargo Documentation (ACD) team comprises the following:

- Transportation Management Supervisor
- Document Supervisor
- Transportation Management NCOs
- Transportation Management Coordinators

The ACD team ensures In-Transit Visibility,

documents imported/exported supplies and equipment, and regulates the movement of cargo.

The Automated Cargo Documentation team comprises a Transportation Management Supervisor, a Document Supervisor, Transportation Management NCOs, and Transportation Management Coordinators.

As a team, they coordinate, monitor, and control the movement of cargo.

Journal Narration:

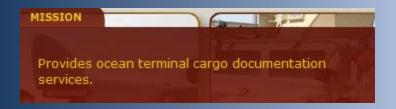
Army Reserve Transportation Officer Thomas Manzagol and Action Officer Eleni Brown asserting the value of ITV.















At Level 1, this unit provides documentation for breakbulk, container, and RO/RO cargo being discharged from up to two ships in fixed ports, or provides documentation for loading one ship in a fixed port or LOTS operation, or provides documentation for unloading one ship in a LOTS operation.

Thomas Manzagol, Army Reserve Transportation Officer Eleni Brown, Action Officer Asserting the Value of ITV

In-Transit Visibility enables the Army to answer the question, "Where is my stuff?"

Automated identification technologies, such as bar-code labels and laser optical cards, allow this information to be obtained in real-time.

Won't it be nice when we're able to look that combatarms Soldier in the eye and say, "Yes, I know exactly where your stuff is."



Senior Transportation Officer Qualification Course Terminal Operations

The Inland Cargo Transfer Company (ICTC) performs the following functions:

- Transfers cargo within and around terminals
- · Documents and examines all cargo
- Provides command, control, supervision, and technical guidance to Cargo Transfer Squads performing operations

The ICTC also operates central receiving and shipping points (CRSPs) and can perform the functions of an Arrival/Departure Airfield Control Group (A/DACG).

Central Receiving and Shipping Points

Central Receiving and Shipping Point (CRSP): a location where units can turn in equipment and containers before deploying and redeploying; reduces the possibility of losing cargo during its transit to its final destination.

The Inland Cargo Transfer Company is responsible for discharging, loading, and transshipping cargo at terminals.

In addition, the unit helps to alleviate cargo backlogs and provide command and control of transportation operations.

Inland Cargo Transfer Company

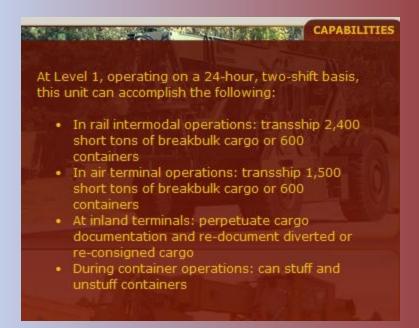














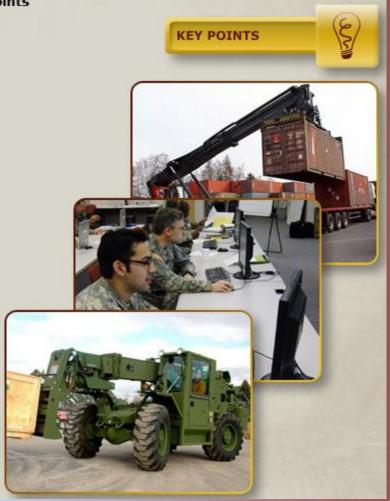
Senior Transportation Officer Qualification Course Terminal Operations

Key Points

The following key points were discussed:

- Aerial Port of Debarkation (APOD)
- Arrival/Departure Airfield Control Group (A/DACG)
- Inland Cargo Transfer Company (ICTC)

The following terminal operations key points were discussed: the functions of the Aerial Port of Debarkation, as well as the Arrival/Departure Airfield Control Group, and the Inland Cargo Transfer Company.





Senior Transportation Officer Qualification Course Terminal Operations

Quick Challenge



A lieutenant calls requesting information about supplies and equipment that are expected to be delivered. Which terminal operations unit would have this information?

Select the best answer and then select Submit.

- A. Deployment and Distribution Support Battalion (DDSB)
- **B.** Harbormaster Detachment
- C. Automated Cargo Documentation (ACD) Team
- D. Air Terminal Movement Control Teams (ATMCTs)





Senior Transportation Officer Qualification Course Terminal Operations

In this lesson, you have learned about the Terminal Operations performed by the U.S. Army Transportation Corps, and the transportation units that perform them, including:

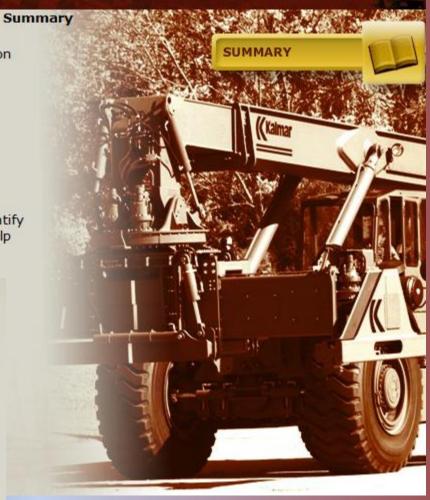
- Seaport Operations Company (SOC)
- Terminal Supervision Team (TST)
- Inland Cargo Transfer Company (ICTC)
- Air Terminals

As a Senior Transportation Officer, being able to identify the terminal operations units within a theater, will help you and others to accomplish future transportation missions.

In this lesson, you have learned about the Terminal Operations units within a theater, including the Seaport Operations Company, the Terminal Supervision Team, the Inland Cargo Transfer Company, and the Arrival / Departure Airfield Control Group at air terminals.

These units are critical because they facilitate the documentation and movement of cargo within their respective terminals.

We are the Transportation Corps; The Spearhead of Logistics. Nothing Happens Until Something Moves!



Good luck on the assessment.